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OUT-OF-BODY EXPERIENCE STUDIES

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Introduction

Much of the discussion of out-of-body experiences has centered around the recounting of experiences and speculation on the nature of those experiences. Some articles have questioned whether the experiences are of an hallucinatory nature or purely a function of biochemical processes that occur in the brain, and, at the other extreme, some have linked them with notions of the existence of an immortal soul and other ideas generally associated with religious interpretations of human existence. Most readers are intrigued by the thought of being able to have and control OBEs, and see them as a potentially interesting experience, though some smaller number of people taking part in discussions are interested in trying to figure out their nature and function and their possible implications for the understanding of what it means to be fully human.

What is an out-of-the-body experience?

Out-of-body-experiences (OBEs) are those curious, and usually brief experiences in which a person's consciousness seems to depart from his or her body, enabling observation of the world from a point of view other than that of the physical body and by means other than those of the physical senses. Thus, an out-of-the-body experience can initially be defined as 'an experience in which a person seems to perceive the world from a location outside his physical body' [Bla82]. In some cases experiments claim that they 'saw' and 'heard' things (objects which were really there, events and conversations which really took place) which could not have seen or heard from the actual positions of their bodies.

OBEs are surprisingly common; different surveys have yielded somewhat different results, but some estimates indicate that somewhere between one person in ten and one person in twenty is likely to have had such an experience at least once. Furthermore it seems that OBEs can occur to anyone in almost any circumstances. Researchers have approached the question of the timing of OBEs by asking people who claim to have had OBEs to describe when they happened. In one of these, over 85 percent of those surveyed said they had had OBEs while they were resting, sleeping or dreaming [Bla84]. Other surveys also show that the majority of OBEs occur when people are in bed, ill, or resting, with a smaller percentage coming while the person is drugged or medicated [Gre68a, Poy75]. But they can occur during almost any kind of activity. Green cites a couple of cases in which motor-cyclists, riding at speed, suddenly found themselves floating above their machines looking down on their own bodies still driving along. Accidents did not ensue. Pilots of high-flying airplanes (perhaps affected by absence of vibration, and uniformity of sensory stimulation) have similarly found themselves apparently outside their aircraft struggling to get in. One might well struggle frantically under such circumstances.

More curious still are reciprocal cases of OBE and apparition: the OBE subject, aware that he is operating in some kind of duplicate body, travels to a distant location where he sees a person and is aware of being seen by that person; this person confirms that he saw an apparition of the OBEer at the time that the OBEer claimed to be in his presence. Thus the two experiences corroborate each other.

Not all OBEs occur spontaneously. Using various techniques, some people have apparently cultivated the faculty of inducing them more or less as desired, and a number have written detailed accounts of their experiences. These accounts do not always in all respects square with accounts given by persons who have undergone spontaneous OBEs. For instance the great majority of those who experience OBEs voluntarily state that they find themselves still embodied, but in a body whose shape, external characteristics, and spatial location are easily altered at will, and an appreciable number refer to an elastic 'silver cord' joining their new body to their old one. A much smaller percentage of those who undergo spontaneous OBEs mention being embodied, and some specifically state that they found themselves disembodied. The 'silver cord' is quite rarely mentioned. It is hard to avoid suspecting that many features of self-induced OBEs are determined by the subject's reading and his antecedent expectations. Common aspects of the experience include being in an 'out-of-body' body much like the physical one, feeling a sense of energy, feeling vibrations, and hearing strange loud noises [GT84]. Sometimes a sensation of bodily paralysis precedes the OBE [Sal82, Irw88, MC29, Fox62].

OBEs, especially spontaneous ones, are often very vivid, and resemble everyday waking experiences rather than dreams, and they may make a considerable impression on those who undergo them. Such persons may find it hard to believe that they did not in fact leave their bodies, and they may draw the conclusion that we possess a separable soul, perhaps linked to a second body, which will survive in a state of full consciousness, perhaps even of enhanced consciousness, after death. Death would be, as it were, an OBE in which one did not succeed in getting back into one's body.

Such conclusions present themselves even more forcefully to the minds of those who have undergone a 'near-death experience' (NDE). It is not uncommon for persons who have been to the brink of death and returned -- following, say, a heart stoppage or serious injuries from an accident -- to report an experience (commonly of a great vividness and impressiveness) as of leaving their bodies, and traveling (often in a duplicate body) to the border of a new and wonderful realm. Reports suggest that the conscious self's awareness outside the body is not only unimpaired but enhanced: events which occurred during the period of unconsciousness are described in accurate detail and confirmed by those present. The subject sometimes 'hears' the doctor pronouncing him dead when he feels intensely alive and free from physical pain, and finds himself returning unwillingly to the constrictions of the physical body. If OBEs show the capacity of the conscious self to have experiences and perceptions outside the

physical body, near-death experiences seem to suggest that this capacity still obtains when the physical body is totally unconscious.

The idea that we all have a double seems to spring naturally out of that of the OBE. If you seem to be leaving your physical body and observing things from outside it then it seems natural to assume that, at least temporarily, you had a double. It also seems obvious that this double could see, hear, think and move. This interpretation is not necessarily valid. As Palmer has so carefully pointed out [Pal78a] the experience of being out of the body is not equivalent to the fact of being out.

According to the English psychologist Susan Blackmore the definition of the OBE as an experience may not be a perfect definition but one of its major advantages is that it does not imply any particular interpretation of the OBE. The consequences of this definition are important. First, since the OBE is an experience, then if someone says he has had an OBE we have to believe him. Conceivably in the future we might find ways of measuring, or establishing external criteria for, the OBE, but at the moment we can only take a person's word for it. Another related consequence is that the OBE is not some kind of psychic phenomenon. As Palmer has explained, 'the OBE is neither potentially nor actually a psychic phenomenon.' This view is a natural consequence of any experiential definition. A private experience can take any form you like. This experience may turn out to be one associated with ESP and paranormal events, but it may not.

What are ESP, PK and psi?

'Extrasensory perception' (ESP) is a term coined by Dr. J. B. Rhine of Duke University. It covers any instance of the apparent acquisition of non- inferential knowledge of matters of fact without the use of the known sense organs. ESP is usually said to have three varieties: 'telepathy,' in which the knowledge is of events in another person's mind, 'clairvoyance,' in which the knowledge is of physical objects or states of affairs; and 'precognition' (telepathic or clairvoyant), where the knowledge relates to happenings still in the future. The word 'knowledge' is, however, not entirely appropriate, for there may be telepathic or clairvoyant 'interaction,' in which a person's mental state or actions may be influenced by an external state of affairs, though he does not 'know' or 'cognize' it.

Another American term is 'psychokinesis' (PK), the direct influence of mental events on physical events external to the agent's body. 'Psi' (from the Greek letter) is 'a general term to identify personal factors or processes in nature which transcend accepted laws' [Gay74]. It is sometimes used to cover both ESP and PK.

What theories have been put forward to account for the OBE?

The notion of the human double has a long and colorful history. Plato gave us an early idea. He believed that what we see in this life is only a dim reflection of what the spirit could see if it were released from the physical. Imprisoned in a gross physical body, the spirit is restricted; separated from that body, it would be able to converse freely with the spirits of the departed, and see things more clearly. Another idea which can be traced to the Greeks is that we have second body. The spirit or some subtle body would be able to see better without its body. Aristotle taught that the spirit could leave the body and that it is capable of communicating with the spirits, while Plotinus held that all souls must be separable from their physical bodies. This 'doctrine of the subtle body' runs through Western tradition.

Homer regarded man as a composite being comprising three distinct entities, namely the body (*soma*), the 'psyche,' and the *thumos*; this last term is untranslatable, but is always closely associated with the diaphragm/midriff (*phrenes*), which was considered to be the seat of the will and feeling, perhaps even of the intellect. At this stage (800 - 750 BC) the term *psyche* had not come to mean personal soul, but rather it represented the impersonal life-principle which dwells in the body but which is unrelated to the intellect and the emotions. A fourth component, the 'image' ('*eidolon*'), might also be included in human make-up; it was this aspect of self which acted and appeared in dreams, where it was considered as a real figure.

Dionysus' early followers in Thrace reenacted his death and resurrection in a gruesome ceremony, where they tore a live bull to pieces with their teeth, and then roamed about the woods shouting frantically. Later rituals were hardly less barbaric and frenzied; all were calculated to induce a stage of religious madness or mania. They took place at night to the accompaniment of loud music and cymbals, thus exciting the chorus of worshippers who soon joined in with shouts of their own. Dancing was so violent that no breath was left for singing, and eventually the worshippers induced through their excesses a state of such exaltation and rapture that it seemed to them that the ordinary limits of life had been transcended, that they were 'possessed,' their soul having temporarily left the body. The soul was in a condition of *enthousiasmos* (inside the god) and *ekstasis* (outside the body); liberated from the confines of the body it enjoyed communion with the god.

Perhaps the most pervasive idea relating to other bodies is that on death we leave our physical body and take on some subtler or higher form. This notion has roots not only in Greek thought and in much of later philosophy, but also in many religious teachings. Some Eastern religions include specific doctrines on the forms and abilities of other bodies and the nature of other worlds; and in Christianity there are references to a spiritual body. Some religious works can be seen as preparing the soul for its transition at death.

The Tibetan Book of the Dead, or *Bardo Thodol* (meaning Liberation by Hearing on the After-Death Plane) was first committed to writing in the eighth century AD, although the editor, Dr W. Y. Evans-Wentz, has no doubt that it represents 'the record of belief of innumerable

generations in a state of existence after death.' It is thought that its teachings were initially handed down orally, then finally compiled and recorded by a number of authors. The book is used as a funeral ritual, and is read out as a guide to the recently deceased. It contains an elaborate description of the moment of death, the stages of mind experienced by the deceased at various stages of post-mortem existence, and the path to liberation or rebirth, as the case may be.

The Bardo body, also referred to as the desire- or propensity-body, is formed of matter in an invisible and ethereal-like state and is, in this tradition, believed to be an exact duplicate of the human body, from which it is separated in the process of death. Retained in the Bardo body are the consciousness-principle and the psychic nervous system (the counterpart, for the psychic or Bardo body, of the physical nervous system of the human body) [Eva60]. Due to its nature, the Bardo body is able to pass through matter, which is only solid and impenetrable to the senses, but not to the instruments of modern physics; and the fact that the conscious self is not embedded in matter enables it to travel instantly where it desires. Flights of the imagination become objectively real, the wish comes true.

In his introductions to The Egyptian Book of the Dead -- called in the language of that people 'Pert Em Hru' ('Emerging by Day') -- Wallis Budge points out that its chapters 'are a mirror in which are reflected most of the beliefs of the various races which went to build up the Egyptians of history.' As all commentators have hastened to indicate, the Book of the Dead is not a unity but a collection of chapters of varying lengths and dating from different ages. A selection of these would be made for the deceased, and would be copied on the walls of the tomb or inscribed on the sides of the sarcophagi; or they might even be written on scrolls of papyri which were then laid within the folds of the bodycloths. The extracts meant to benefit the deceased in a variety of ways.

In the Egyptian Book of the Dead the perishable physical body, preservable only by mummification, is called the khat. Next comes the ka, which is generally translated as 'double,' and is defined by Wallis Budge as 'an abstract individuality or personality which possessed the form and attributes of the man to whom it belonged, and, though its normal dwelling place was in the tomb with the body, it could wander about at will; it was independent of the man and could go and dwell in any statue of him.'

The ba, or heart-soul, is depicted as a bird and is often translated as 'soul.' It is sometimes conceived of as an animating principle within the body, but elsewhere it is hinted that one only becomes a ba after death, when it either dwells with the ka in the tomb or with Ra or Osiris in heaven. The ba is often referred to in connection with the spiritual soul (khu), which was regarded as imperishable and existed in the spiritual body (sahu). The sahu was originally considered to be a more material body, and may have formed a part of an early and literal view of the resurrection, whereby the sahu, ba, ka, khaibit (shadow) and ikhu (vital force) all came

together again after 3,000 years, and the man was reanimated. Gradually the sahu came to be regarded as more spiritual in its compositions, and the idea of physical resurrection lost its prominence. It was believed that this sahu was germinated from the physical body, provided that it was not corrupt, and that the appropriate ceremonies had been performed by the priests.

The Egyptians agree with the Primitives and the Tibetans in asserting a form of continued existence after physical death. Their notions are less psychologically consistent and subtle than those of the Tibetans, but much more complex and symbolically developed than those of the Primitives, whom they resemble only in the earliest stages of their civilisation. Their unique features center round the overwhelming dread of physical corruption and corresponding longing for the germination of the indestructible sahu in which the khu will exist 'for millions and millions of years.'

One of the directly relevant ideas derives from the teachings of Theosophy. Within a scheme involving several planes and several bodies, the OBE is interpreted as a projection of the 'astral body' from the physical body. Theosophical ideas have influenced the thinking and terminology of many OBE researchers since many people reporting OBEs have found terms like 'astral projection' which derive from Theosophy to be useful in describing their experiences. Other researchers, however, find such terminology and the model it has been devised to describe to be unnecessarily biased in favor of a certain 'esoteric' interpretation of the actual experiences.

The idea that we have a double also appears in popular mythology. Often these doubles have sinister overtones, or are associated with the darker side of the psyche, but usually they are supposed to be quite harmless. These phenomena seem to be related to the OBE in that they involve a double, but there the resemblance ends.

Dean Sheils [She78] compared the beliefs of over 60 different cultures by referring to special files kept for anthropological research. Of 54 cultures for which some information was reported, 25 (or 46%) claimed that most or all people could travel outside the physical body under certain conditions. A further 23 (or 43%) claimed that a few of their number were able to do so, and only three cultures expressed no belief in anything of this nature. In a further three cultures the possibility of OBEs was admitted but the proportion of people who could experience it was not given. From this evidence, we can conclude that some form of a belief in out-of-body experiences is very common in various cultures.

Apparently, as many cultures interpret dreams as OBEs as those which do not. The notion that one may induce an OBE deliberately is not entirely absent from the cultures included by Sheils, though it is usually confined to certain types of people. Often only shamans can achieve OBEs, sometimes by using special drugs or methods for inducing a trance. Of those cultures described by Sheils, there were several in which there was a common belief that the soul could travel in earthly places, while in others the general belief was that the soul could

only move in the world of the dead or spirits, and in others both kinds of soul travel were accepted.

There are stories of bilocation in which the physical body exists and acts in two separate places at once. But physical effects in OBE are rare. Also related to OBEs are the phenomena of traveling clairvoyance, ESP projection and remote viewing. 'Traveling clairvoyance' was used to describe a form of clairvoyance in which a medium or sensitive seemed to observe a distant place, therefore it included both OBEs and experiences in which the clairvoyant 'perceived' the distant scene but without any experience of leaving the body. In both 'traveling clairvoyance' and 'ESP projection' the occurrence of ESP is presupposed, but the experience of leaving the body is not. Remote viewing is a recent and better-defined term. Typically a subject describes or draws his impressions while an 'outbound experimenter' visits randomly selected remote locations. Later the descriptions and the locations are matched up. Remote viewing has often been compared with OBEs, and sometimes subjects who can have OBEs are used in remote viewing experiments.

Many people have argued that the OBE itself is some kind of dream and involves no double other than an imaginary one. However, an ordinary dream does not have those important features of the experient seeming to leave the body and being conscious of perceiving things as they occur. In this sense OBEs are better compared with lucid dreams, which are dreams in which the sleeper realizes, at the time, that he or she is dreaming. In such an experience, the sleeper may become perfectly conscious in the dream, which makes the experience very much like an OBE.

The experience of seeing one's own double has been called 'autoscopv' or 'autoscopic hallucinations.' Here again the double is not the 'real' or conscious person. It is seen as another self, but the original self still appears the most real. In the OBE it is the 'other' which seems most alive.

It has been argued that the OBE is an hallucination, and any other body or double is likewise hallucinatory. There are in fact many similarities between some kinds of hallucinations and OBEs.

Among other experiences difficult to disentangle from OBEs are a variety of religious and transcendental experiences. People may feel that they have grown very large or very small, becoming one with the Universe or God. Everything is seen in a new perspective, and may seem 'real' for the very first time. It is difficult to draw a line between a religious experience and an OBE and any line one does draw may seem artificial or arbitrary.

What is an astral projection?

Superficially, the idea of having a double may seem to explain the OBE. However, as soon as this idea is pursued, problems become obvious and the system has to get more complicated to deal with those problems. One of the most complex, and certainly the most influential, of such systems is the theory of astral projection, based on the teachings of theosophy. In 1875 Madame Blavatsky founded the Theosophical Society in New York, to study Eastern religions and science. From her teachings, brought back from her travels in India and elsewhere, a complex scheme evolved. According to the Theosophists, man is not just the product of his physical body, but is instead thought to be a complex creature consisting of many bodies, each finer and more subtle than the one 'below' it. These bodies should be thought of as an outer garment which can be thrown off to reveal the true man within.

Although there are variations in the details, it is commonly claimed that there are seven great planes and seven corresponding bodies or vehicles. The grossest of all is the physical body, of flesh, with which we are all familiar. There is supposed to be another body also described as physical known as the 'etheric double,' or 'vehicle of vitality.' Etheric double is the manifestation of physical vitality. It is constant and does not change throughout the cycles of life and death, but it is not eternal, for it is eventually re-absorbed into the elements of which it is composed. This 'double' acts as a kind of transmitter of energy, keeping the lower physical body in contact with the higher bodies. Etheric substance is seen as an extension of the physical.

Next up the scale is supposed to be the 'astral world' and its associated 'astral body', or the 'vehicle of consciousness'. These entities are thought to be finer than their etheric counterparts and correspondingly harder to see. Astral body is thought to be 'a replica of the physical body (the gross body), but of a more subtle and tenous substance, penetrating every nerve, fibre and cell of the physical organism, and constantly in a supersensitive state of vibration and pulsation' [Gay74].

The astral world consists of astral matter, and all physical objects have a replica in the astral. There is therefore a complete physical copy of everything in the astral world, but in addition there are things in the astral which have no counterpart in the physical. There are thought forms created by human thought, elementals and the lowest of the dead, who have gone no further since they left the physical world. All these entities and many others are used in ritual magic, and thought forms can be specially created to carry out tasks such as healing, carrying messages, or gaining information.

In the scheme just described, those who have the ability are supposed to be able to see the nature of a person's thoughts by changes in the color and form of the astral body. All around the physical can be seen the bright and shining colors of the larger astral body, making up the astral aura. The aura is multi-colored and brilliant, or dull, according to the character or quality of the person and therefore 'to the seer, the aura of a person is an index to his hidden propensities' [Gay74].

All these conceptions are of special relevance because of the fact that the astral body is supposed to be able to separate from the physical and travel without it. Since the astral is the vehicle of consciousness, it is this body which is aware, not the physical. It is said that in sleep the astral body leaves the sleeping body. In the undeveloped person, little memory is retained and the astral body is vague and its travels are limited and directionless, but in the trained person the astral can be controlled, can travel great distances in sleep, and can even be projected from the physical body at will. It is this which is called astral projection.

In astral projection the consciousness can travel almost without limitation, but it travels in the astral world. It therefore sees not the physical objects, but their astral counterparts, and in addition the beings that live in the astral realms. The astral world has been known as the 'world of illusion' or world of thoughts. The unwary traveler can become confused by the power of his own imaginings. In this state one can appear, as an apparition to anyone who has 'astral sight.' Indeed one can appear to other too, but to do so requires some involvement of lower matter, for example of etheric matter, as in ectoplasm. Ectoplasm is considered to be the materialization of the astral body and is described as 'matter which is invisible and impalpable in its primary state, but assuming the state of a vapour, liquid or solid, according to its stage of condensation' [Gay74].

An aspect of astral traveling which has become important in later writings, though it appears little in early theosophy, is the silver cord. It is held that in life the astral body is connected to its physical body by an infinitely elastic but strong cord, of a flowing and delicate silver color. Traditionally the cord must remain connected or death will ensue. As one approaches death, the astral gradually loosens itself, lifts up above the physical, and then the cord breaks to allow the higher bodies to leave. Death is thus seen as a form of permanent astral projection.

Beyond the astral Theosophy distinguishes a further five levels. These include the mental or devachnic world, the buddhic, the nirvanic, and two others so far beyond our understanding that they are rarely described. The task of every person is to progress through all of these.

Is astral projection an adequate explanation?

Many investigators are convinced of the reality of astral projection. Among the best known are Muldoon and Carrington, and Crookall. Sylvan Muldoon claimed to be able to project at will and described his experiences in *The Projection of the Astral Body* [MC29] written in collaboration with the psychical researcher Hereward Carrington. Together these two collected many cases of spontaneous OBEs which they amassed as support for the reality of astral projection. Many years later Robert Crookall [Cro61-78], in more systematic fashion, did much the same thing. Many of the people who report OBEs have found the notion of astral projection helpful, and describe their experiences in these terms.

There are several serious problems with the theory of astral projection, as pointed out by Susan Blackmore [Bla82]. The first is that many OBEs simply do not fit well into the astral projection framework. Celia Green [Gre68a] has collected many cases in which the person describes no astral body, indeed no other body at all. Also very few people actually report any cord, let alone the traditional silver cord.

Of course this type of experience can be fitted in by saying that the experient's astral vision was clouded, or the astral body or cord too fine to be seen, but these methods of attempting to account for actual experience begin to weaken the theory. Blackmore criticizes the complexity of the theory of astral projection as it tries to account for new facts. And this relates to the second problem, its 'stretchability.' In her opinion the theory is so complicated and flexible that almost anything can be stretched to fit it and it makes hard to draw definite predictions from the theory. If you don't see the features you should, your astral vision is not clear enough, or memory was not passed on from higher levels. If you fail to make yourself visible to someone else then not enough etheric matter was involved and so on. In this way the 'theory' is in danger of explaining everything and nothing. Furthermore, any theory which is untestable is useless in scientific terms.

What is animism?

A school of thought has grown up within parapsychology, and around its fringes, which takes very seriously the idea of death being an OBE in which one did not succeed in getting back into one's body. Gauld [Gau82] refers to this school of thought as the 'animistic' school (anima = soul), 'animism' being the view that every human mind, whether in its before death or after death state 'is essentially and inseparably bound up with some kind of extended quasi-physical vehicle, which is not normally perceptible to the senses of human beings in their present life' [Bro62]. An argument which one commonly hears from members of the animistic school runs as follows: OBEs and near-death experiences are, so far as we can tell, universal. They have been reported from many different parts of the world and in many different historical eras. The experiences of the persons concerned therefore must reflect genuine features of the human constitution; for we cannot possibly suppose that they derive from a common stream of religious tradition or folk-belief -- the societies from which they have been reported are too widely separated in space and time for the common-origin idea to be a serious possibility. The most powerful shot in the the animist's locker remains, however, still to be mentioned.

There are some cases -- by no means a negligible number -- in which a person who is undergoing an OBE, and finds himself at or 'projects' himself to a particular spot distant from his physical body, has been seen at that very spot by some person present there. Such cases are generally known as 'reciprocal' cases. Thus the animist, starting from his study of OBEs and NDEs, claims to have direct evidence that after death we remain the conscious individuals that we always have been and that the 'vehicle' of our surviving memories and other

psychological dispositions is a surrogate body whose properties (other perhaps than that of being malleable by thought) are, he would admit, largely unknown.

In addition to taking OBEs and NDEs as themselves evidence for survival, the animist might well feel able to offer the following argument in support of regarding a further class of phenomena as evidence for survival of consciousness following physical death. There is in the literature on apparitions a substantial sprinkling of cases of apparitions of deceased persons, some of which have been seen by witnesses who did not know the deceased in life. An extensive statistical investigation by the late professor Hornell Hart [Har56] strongly suggests that apparitions of the dead and the phantasms of living 'projectors' in reciprocal cases are, as classes, indistinguishable from each other in what may be called their 'external characteristics' -- such as whether the figure was solid, dressed in ordinary clothes, seen by more than one person, whether it spoke, adjusted itself to its physical surroundings, etc. Now we know that in reciprocal cases the phantasms of the projector is in some sense a center of or a vehicle of consciousness, namely the consciousness of the projector. Since apparitions of the dead and of living projectors manifestly belong to the same class of objects or events, we may properly infer that since the apparitions of living projectors are vehicles for the consciousness of the person in question, this must be true of apparitions of the dead also. Hence the consciousness of deceased persons survives and may either have, or make use of, a kind of body.

Can the OBEer be seen as an apparition?

The study of apparitions formed an important part of early physical research, and many different types of apparition have been recorded, but the ones which primarily interest us here are those in which a person having an OBE simultaneously appeared to someone else as an apparition. There are many cases of this kind in the early literature and they have been quoted again and again but a relatively small number of them really form the mainstay of the anecdotal evidence on OBE apparitions. Crookall [Cro61] and Smith [Smi65] give some recent cases but they too concentrate on the older ones. Green [Gre68a] discusses the similarities between apparitions in general and the asomatic body perceived by OBEers, but she does not give any examples from her own case collection in which another person saw the exteriorized double. By contrast, about 10% of Palmer's OBEers claimed to have been seen as an apparition [Pal79b] and Osis claims that from his survey OBEers 'frequently' said they were noticed by others and in 16 cases (6% of the total) he was able to obtain some verification through witnesses, although he does not expand on this remark. Obviously it would be very helpful if much more evidence of this sort could be collected, and recent cases thoroughly checked.

How can one find out what an OBE is like?

One of the easiest ways to find out what OBE is like is to collect a large number of accounts of cases and compare them. In this way any common features can be extricated and variations noted. A great deal can be learned about the conditions under which the experiences occurred, how long they lasted, and what they were like. Accounts by people who have had OBEs fall, roughly speaking, into two categories. There are the many ordinary people to whom an OBE occurs just once, or a few times; and there is a small number of people who claim to be able to project at will.

The limitations of this method are that there are many important questions which cannot be answered by collecting cases. Since the people voluntarily report their experiences, the sample necessarily ends up with a bias. Many accounts are given many years or even decades after the event and it is then impossible to determine how much of the story has altered in memory with the passage of time. For such reasons it is not possible to determine, for example, how common the experience actually is. Second, many OBEers claim that they were able to see rooms into which they had never been, describe accurately people they had never met, or move physical objects during their experience. Such reports are of great interest to parapsychology but they cannot be tested by collecting cases.

What is an average astral projection like?

Accounts of OBEs have been collected since the beginning of psychical research. The first collection of cases of spontaneous apparitions, telepathy, and clairvoyance published in 1886 as 'Phantasms of the Living' [GMF86]. Frederic Myers also collected similar cases for his 'Human Personality and its Survival of Bodily Death' [Mye03].

The first major collection was made by Muldoon and Carrington and published in 1951 [MC51]. Nearly a hundred accounts were categorized according to whether they were produced by drugs or anaesthetics, occurred at the time of accident, death or illness, or were set off by suppressed desire. Finally they gave cases in which spirits seemed to be involved. By categorizing the cases in this way, Muldoon and Carrington were able to compare and interpret them in the light of their theories of astral projection, but they did not go beyond this rather simple analysis. These researchers implied that we do have a double, and that it is capable of perceiving at a distance and even of surviving without the physical body.

The largest collections of accounts of astral projection have been amassed by Robert Crookall. In his many books [Cro61, 64a] he has presented hundreds of cases which show the kinds of consistencies as Muldoon and Carrington found. He also divided the cases according to how they were brought about. First there were the 'natural' ones which included those people who nearly died or were very ill or exhausted, as well as those who were quite well. Contrasted with these were the 'enforced' cases, being induced by anaesthetics, suffocation and falling, or deliberately by hypnosis.

Typical features of Crookall's accounts were the mysterious light illuminating the darkness, the white double, the ability to travel at will and inability to affect material objects. Crookall cited typical elements of the natural projection being the cord joining the two bodies, feelings of peace and happiness and the clarity of mind and 'realness' of everything seen. By contrast with what Crookall calls 'the enforced' OBE, by which he means one which is entered into deliberately by the experient, he argued the person typically finds himself not in happy and bright surroundings but in a dream or conditions reminiscent of popular conceptions of 'Hades.'

In projection two aspects can be exteriorized: in natural OBEs the soul body or the astral body is ejected free of the vehicle of vitality and the vision of the experient is clear, but when the OBE is the result of a conscious effort to have an OBE some of the lower vehicle is shed at the same time and clouds the vision. The same principles apply in death: natural deaths according to NDE accounts usually lead to an experience of paradisaical conditions, but the victim of an 'enforced' death is likely to find himself in Hades with clouded vision and consciousness.

The implication of Crookall's argument is that there is an astral body, a vehicle of vitality and a silver cord, and that we survive death to live on a higher plane. He believed that insofar as such a thing could be proved, the many cases he had collected proved the existence of out other bodies.

What is an average OBE like?

The previous case collections were made by researchers who believed implicitly in the astral projection interpretation of the OBE. A properly analyzed case collection can provide a rich source of information about what the OBE is like. The collections used here include those by Hart, Green, Poynton and Blackmore and the analysis is made by Blackmore [Bla82].

Hornell Hart, a professor of sociology at Duke University in North Carolina, collected together cases of what he called 'ESP projection' [Har54]. He required that the person not only have an OBE, but also acquire veridical information, as though from the OB location. This excludes many OBEs in which the information gained was wrong or could not be checked. He also rated the cases. The best possible case would gain a score of 1.0, but in fact the highest score given was .90. No higher scores were gained because the cases show a curious mixture of correct and incorrect vision which seems to be common in the OBE.

Through this research, one assumption is crucial, that ESP projection is a single phenomenon which might have any or all of Hart's eight features. Rogo [Rog78b] and Tart [Tar74a] have both suggested that several different types of experience may have been lumped together under the label 'OBE.' It could be that astral projection, traveling clairvoyance, and apparitions are quite different and need different interpretations, or other distinctions might be more relevant. The reason Hart gave why the non- evidential cases should be excluded is far from

satisfactory: if there was no evidence of ESP they did not count in his analysis. Hart was ruling out the majority of cases on the basis of a very shaky criterion.

Perhaps the most thorough, and certainly the best-known case collection was carried out by Celia Green of the Institute of Psychophysical Research [Gre68a]. Her definition of an OBE was an experience, defined as follows, '... one in which the objects of perception are apparently organized in such a way that the observer seems to himself to be observing them from a point of view which is not coincident with his physical body.' J. C. Poynton [Poy75], like Green, advertised in the press, and circulated a questionnaire privately, and on the whole Poynton's results, although less detailed, are similar to Green's. Susan Blackmore [Bla82] has analyzed the cases collected by the SPR and by herself.

Table: Some Results of Case Collections [Bla82]

	Green	Poynton	SPR cases	Blackmore
Proportion of 'single' cases	61%	56%	69%	47%
Some features of 'single' cases:				
Saw own body	81%	80%	72%	71%
Had second body	20%	75%	--	57%
Definite sensation on separation	'majority' none	25%	36%	--
Had connecting cord	4%	9%	8%	--

Apparently most people have had only one OBE, but the frequency of subjects claiming many OBEs is high enough to conclude that if a person has had one OBE he or she is more likely to have another. Also many people learn to control their OBEs to some extent, even if they never learn to induce them reliably at will.

OBEs are occurring in a variety of situations. Green found that 12% of single cases occurred during sleep, 32% when unconscious, and 25% were associated with some kind of psychological stress, such as fear, worry, or overwork. Some cases show that it is possible to have an OBE while the body continues with complex and co-ordinated activity. However, OBEs are far more common when the physical body is relaxed and inactive.

Most of Green's cases occurred to people whose physical body was lying down at the time (75%). A further 18% were sitting and the rest were walking, standing or were 'indeterminate.' In fact it seemed that muscular relaxation was an essential part of many people's experience. Just a few found that their body was paralyzed. A feeling of paralysis was found to be only rarely a prelude to an OBE.

A difference is found between the 'single' cases and the multiple cases. The latter tended to have had experiences in childhood, and learned to repeat them. The single cases tended to occur mostly between the ages of 15 and 35. Poynton found that many more of his cases came from females, but among the SPR cases there are more males than females. This sort of difference is most likely to be due to sample differences.

Floating and soaring sensations are certainly common. Poynton also found that most of his OBEers saw or felt their physical body. On the contrary, catalepsy rarely occurred. Some subjects mentioned noises or a momentary blacking out, but this did not seem to be the rule. The majority just 'found themselves' in the ecsomatic state. As for the return, for most it was as sudden as the departure. An interesting finding by Green was that more of the subjects who had had many OBEs went through complex processes on separation and return.

Green separated her cases into those she called 'parasomatic,' involving another body, and those she termed 'asomatic' in which there was no other body. Her surprising finding was that 80% of cases were asomatic -- they had no other body. She asked her subjects whether they had felt any connection between themselves and their physical bodies. Under a third said they had, and only 3.5% reported a visible or substantial connection such as a cord. Poynton's results tell a similar story. There seems to be little evidence from the case collections to support the usual details of astral projection.

Green found that on the whole perceptual realism was preserved. Subjects saw their own bodies and the rooms they traveled in as realistic and solid. Even when the scene appears to be perfectly normal there may be slight differences. Some her subjects said that everything looked and felt exaggerated. The experience is typically in only one or two modalities: vision and hearing. Green found that 93% of single cases included vision, a third also had hearing, but the other senses were rarely noted. Another interesting feature of the OBE world is its lighting. In some mysterious way the surroundings become lit up with no obvious source of light visible, or else objects seem to glow with a light of their own.

Perhaps the most important question about the OBE is whether people can see things they did not know about -- in other words whether they can use ESP in the course of an OBE. Among Green's subjects, some felt as though they could have seen anything, but lacked the motivation to test out such an ability. Another related question is whether subjects in an OBE

can affect objects, or have the power of psychokinesis. On the whole the evidence is against that possibility.

The last feature which Celia Green found to be common in OBEs is that a spontaneous OBE can have a profound effect on the person who experiences it. Sometimes OBEs can be very frightening, sometimes exciting and sometimes they provide a sense of adventure.

Interestingly, Green found that fear was more common in later, not initial experiences.

Pleasant emotions are also common.

How common are OBEs?

Two surveys have used properly balanced samples drawn from specified populations. The first was conducted by Palmer and Dennis [PD75, Pal79b]. They chose the inhabitants of Charlottesville, Virginia, a town of some 35,000 people and selected 1,000 of these as their sample. The question on OBEs was worded as follows: 'Have you ever had an experience in which you felt that "you" were located "outside of" or "away from" your physical body; that is the feeling that your consciousness, mind, or center of awareness was at a different place than your physical body? (If in doubt, please answer "no".)' To this 25% of students and 14% of the townspeople said 'yes.'

Further data from this survey reveals that no relationship between age and reported OBEs was found. Palmer found a significant positive relationship between drug use and OBEs and concluded that this could account for the higher prevalence of OBEs in students. This relationship receives confirmation from work by Tart [Tar71]. In a survey of 150 marijuana users he found that 44% claimed to have OBEs. It seems possible that the use of this drug facilitates OBEs.

The second survey using a properly constructed sample was carried out by Erlendur Haraldsson, an Icelandic researcher, and his colleagues [HGRLJ76]. For the survey a questionnaire was sent to a random sample of 1157 persons between ages of 30 and 70 years. There were 53 questions on various psychic and psi-related experiences including a translation of Palmer's question. To this, only 8% of the Icelanders replied yes.

Table: Surveys of the OBE [Bla82]

Author	Year	Respondents	Size of sample	N 'YES'	% 'YES'
Hart	1954	Sociology students	113	28	25
		Sociology students	42	14	33

Green	1966	Southampton University students	115	22	19
	1967	Oxford University students	380	131	34
Palmer	1975	Charlottesville Townspeople	-	-	14
		Students	-	-	25
Tart	1971	Marijuana users	150	66	44
Haraldsson	1977	Icelanders	-	-	8
Blackmore	1980	Surrey University students	216	28	13
		Bristol University students	115	16	14
Irwin	1980	Australian students	177	36	20
Bierman & Blackmore	1980	Amsterdam students	191	34	18
Kohr	1980	Members of Association for Research and Enlightenment	-	-	50

Those vague statements about OBEs being 'common' are now backed up by a variety of figures. Blackmore gives a personal estimate of the incidence of OBEs, based on all the available evidence, putting it at around 10%. She thinks we can say with more conviction that the OBE is a fairly common experience.

The surveys show that if a person has had one OBE he or she is more likely to have another. All these figures are far higher than you would expect if OBEs were distributed at random in the population.

Green went on to compare different groups to see whether they had had different numbers of OBEs. Her only finding was that OBEers were more likely to report experiences which they

thought could only be attributed to ESP. Palmer and Kohr found that subjects who reported one type of 'psychic' or 'psi-related' experience also tended to report others.

Palmer also, like Green, found that many simple variables were irrelevant. Sex, age, race, birth order, political views, religion, religiosity, education, occupation and income were all unrelated to OBEs.

Palmer found significant relationships between OBEs and practising meditation, mystical experiences and, as we have already seen, drug experiences. Palmer had over 100 people reporting one or more OBEs, and asked them various questions about the experience. They were asked whether they had seen their physical body from 'outside' and this was reported for 44% of the experiences and by nearly 60% of the OBEers. Fewer than 20% of experiences involved 'traveling' and fewer than 30% of OBEers reported it. Still fewer reported that they had acquired information by ESP while 'out-of-the-body,' about 14% of people and 5% of experiences, or had appeared as an apparition to someone else (less than 10% of OBEers). These results confirm the findings of the case collections: that few OBEs include all the features of a classical astral projection.

Overall the OBE seemed to have had a highly beneficial effect on its experiencers. Many claimed their fear of death was reduced, and their mental health and social relationships improved. Ninety-five per cent said they would like to have another OBE.

What are the prerequisites for inducing an OBE?

Many of the inducing methods use as a starting point techniques designed to improve the novice's powers of relaxation, imagery, and concentration. The ideal state appears to be one of physical relaxation, or even catalepsy, combined with mental alertness.

One of the easiest ways to relax is to use progressive muscular relaxation. In outline this technique consists of starting with the muscles of the feet and ankles and alternately tensing and relaxing them, then going on up the muscles of the calves and thighs, the torso, arms, neck and face, until all the muscles have been contracted and relaxed. Done carefully this procedure leads to fairly deep relaxation within a few minutes, and with practice it becomes easier.

Relaxation usually leads to state of paralysis or catalepsy. When you go to sleep, your brain deactivates the mechanism by which you are able to use your limbs, so that you become incapable of physical activity corresponding to your dream images when you dream. Quite a few people have found themselves in this paralysis state as soon as they have gotten up after sleeping.

The first type of paralysis, known as 'type A,' is a condition encountered when approaching a deeper layer of consciousness from a light trance state. The second, type B paralysis, is the reverse of type A, in that it happens during the return home to physical reality. The first type A 'paralysis' goes something like this:

"Mmmmm.... I know I am awake; I can think Mmmmmmm but my body is asleep ..." (Robert Monroe labelled it Focus 10 consciousness)

"Wait a minute here, there is something going on here, I just can't seem to...."

"Yes, I can't seem to move my limbs; they seemed to be laden with lead, why can't I move at all? Hey, what's happening here! (Panic!)"

A typical type B 'paralysis' goes something like this:

"Mmmmm... I am feeling groggy, absolutely. What was that just now, oh, it must be some dream..."

"Mmm..... hang on a minute, was that a noise I heard? It must have come from the door... I need to check it out, could be a burglar..... but I am so tired... and sleepy..."

"I need to wake up, it could be important.... Hey, I can't seem to wake up, why are my legs not waking up, why can't my hands respond?"

"PANIC!!! I need to wake up!!! I don't want to die... I need to exert more will on this... Hey, body, wake up, eyes open, ... WAKE UP!"

"Gosh, NOW, I can move my limbs, I am awake now, body covered with perspiration, sitting at the edge of the bed, wondering why just now I simply couldn't wake up..."

"Phew -- Thank goodness, it is finally over. Am I glad to be back to the familiar physical environment."

However, type A paralysis is the type that should not be resisted; if the person can allow himself to 'go with the flow,' then some kind of altered state of consciousness is bound to happen, which is what the person is hoping to achieve anyway.

Many astral travelers have stressed the importance of clear imagery or visualization for inducing OBEs and of course imagery training forms an important part of magical development. Progressive methods of imagery training are often described in magical and occult books, and helpful guidance can be found in Conway's occult primer [Con72], and in Brennan's 'Astral doorways' [Bre71]. Most involve starting with regular practice at visualizing

simple geometrical shapes and then progressing to harder tasks such as imagining complex three-dimensional forms, whole rooms and open scenery.

Practice 1: Read the description slowly and then try to imagine each stage as you go along: Imagine an orange. It is resting on a blue plate and you want to eat it. You dig your nail into the peel and tear some of it away. You keep pulling on the peel until all of it, and most of the pith, is lying in a heap on the plate. Now separate the orange into segments, lay them on the plate as well, and then eat one.

If this task doesn't make your mouth water, and if you cannot feel the juice which squirts from the orange, and smell its tang then you do not have vivid or trained imagery. Try it again, the colors should be bright and vivid and the shapes and forms clear and stable. With practice at this and similar tasks your imagery will improve until you may wonder how it could ever have been so poor.

Practice 2: This is a rather harder one: Visualize a disc, half white and half black. Next imagine it spinning about its center, speeding up and then slowing down, and stopping. Next imagine the same disc in red, but as it spins it changes through orange, yellow, green, blue and violet. Finally you may care to try two discs side by side spinning in opposite directions and changing color in opposition too.

Other useful skills are concentration and control. Not only do you need to be able to produce vivid imagery, but also to abolish all imagery from your mind, to hold images as long as you want and to change them as you want, both quickly and slowly.

Practice 3: Brennan suggests trying to count, and only to count. The instant another thought comes to mind you must stop and go back to the beginning. If you get to about four or five you are doing well, but you are almost certain to be stopped by such thoughts as 'this is easy, I've got to three already,' or 'I wonder how long I have to go on.'

All these skills, relaxation, imagery and concentration, are suggested again and again as necessary for inducing an OBE at will. Other aids include posture. If you lie down you might fall asleep, although Muldoon [MC29] advocates this position. On the other hand discomfort will undoubtedly interfere with the attempt. Therefore an alert, but comfortable posture is best. Some have suggested that it is best not to eat for some hours before and to avoid any stress, irritation or negative emotions.

How to induce an OBE?

Imagery Techniques

It is possible to use imagery alone but it requires considerable skill.

a) Lie on your back in a comfortable position and relax. Imagine that you are floating up off the bed. Hold that position, slightly lifted, for some time until you lose all sensation of touching the bed or floor. Once this state is achieved move slowly into an upright position and begin to travel away from your body and around the room. Pay attention to the objects and details of the room. Only when you have gained some proficiency should you try to turn round and look at your own body. Note that each stage may take months of practice and it can be too difficult for any but a practiced OBEer.

b) In any comfortable position close your eyes and imagine that there is a duplicate of yourself standing in front of you. You will find that it is very hard to imagine your own face, so it is easier to imagine this double with its back to you. You should try to observe all the details of its posture, dress (if any) and so on. As this imaginary double becomes more and more solid and realistic you may experience some uncertainty about your physical position. You can encourage this feeling by contemplating the question 'Where am I?', or even other similar questions 'Who am I?' and so on. Once the double is clear and stable and you are relaxed, transfer your consciousness into it. You should then be able to 'project' in this phantom created by your own imagination. Again, each stage may take long practice.

Inducing a Special Motivation to Leave the Body

You can trick yourself into leaving your body according to Muldoon and Carrington [MC29]. They suggested that if the subconscious desires something strongly enough it will try to provoke the body into moving to get it, but if the physical body is immobilized, for example in sleep, then the astral body may move instead. Many motivations might be used but Muldoon advised against using the desire for sexual activity which is distracting, or the harmful wish for revenge or hurt to anyone. Instead he advocated using the simple and natural desire for water -- thirst. This has the advantages this it is quick to induce, and it must be appeased.

In order to employ this technique, you must refrain from drinking for some hours before going to bed. During the day increase your thirst by every means you can. Have a glass of water by you and stare into it, imagining drinking, but not allowing yourself to do so. Then before you retire to bed eat 'about an eighth of a teaspoonful' of salt. Place the glass of water at some convenient place away from your bed and rehearse in your all the actions necessary to getting it, getting up, crossing the room, reaching out for it, and so on. You must then go to bed, still thinking about your thirst and the means of satisfying it. The body must become incapacitated and so you should relax, with slow breathing and heart rate and then try to sleep. With any luck the suggestions you have made to yourself will bring about the desired OBE. This is not one of the most pleasant or effective methods.

Ophiel's 'Little System'

Ophiel [Oph61] suggests that you pick a familiar route, perhaps between two rooms in your house, and memorize every detail of it. Choose at least six points along it and spend several minutes each day looking at each one and memorizing it. Symbols, scents and sounds associated with the points can reinforce the image. Once you have committed the route and all the points to memory you should lie down and relax while you attempt to 'project' to the first point. If the preliminary work has been done well you should be able to move from point to point and back again. Later you can start the imaginary journey from the chair or bed where your body is, and you can then either observe yourself doing the movements, or transfer your consciousness to the one that is doing the moving. Ophiel describes further possibilities, but essentially if you have mastered the route fully in your imagination you will be able to project along it and with practice to extend the projection.

Ophiel states that starting to move into OBE will produce strange sounds. He says that this is because the sense of hearing is not carried over onto the higher planes, and that means that your mind tries to recreate some input, and just gets subconscious static. He asserts that the noises can take any form, including voices, malevolent, eerie, and get worse and worse, more and more disturbing, until eventually they peak and then just fade to a constant background hiss while one has OBE. Apparently, his 'final noise' sounded like his water heater blowing up. He says, anyway, to ignore the noises, voice or otherwise, as they are only static or subconscious rambling, and do not represent any being in any way, not even the self really.

The Christos Technique

G. M. Glasking, an Australian journalist, popularized this technique in several books, starting with *Windows of the Mind* [Gla74]. Three people are needed: one as subject, and two to prepare him. The subject lies down comfortably on his back in a warm and darkened room. One helper massages the subject's feet and ankles, quite firmly, even roughly, while the other take his head. Placing the soft part of his clenched fist on the subject's forehead he rubs it vigorously for several minutes. This should make the subject's head buzz and hum, and soon he should begin to feel slightly disorientated. His feet tingle and his body may feel light or floaty, or changing shape.

When this stage is reached, the imagery exercises begin. The subject is asked to imagine his feet stretching out and becoming longer by just an inch or so. When he says he can do this he has to let them go back to normal and do the same with his head, stretching it out beyond its normal position. Then, alternating all the time between head and feet, the distance is gradually increased until he can stretch both out to two feet or more. At this stage it should be possible for him to imagine stretching out both at once, making him very long indeed, and then to swell up, filling the room like a huge balloon. All this will, of course, be easier for some people than others. It should be taken at whatever pace is needed until each stage is successful. Some people complete this part in five minutes, some people take more than fifteen minutes.

Next he is asked to imagine he is outside his own front door. He should describe everything he can see in detail, with the colors, materials of the door and walls, the ground, and the surrounding scenery. He has then to rise above the house until he can see across the surrounding countryside or city. To show him that the scene is all under his control he should be asked to change it from day to night and back again, watching the sun set and rise, and the lights go on or off. Finally he is asked to fly off, and land wherever he wishes. For most subjects their imagery has become so vivid by this stage that they land somewhere totally convincing and are easily able to describe all that they see.

You may wonder how the experience comes to an end, but usually no prompting is required; the subject will suddenly announce 'I'm here,' or 'Oh, I'm back,' and he will usually retain quite a clear recollection of all he said and experienced. But it is a good idea to take a few minutes relaxing and getting back to normal. It is interesting that this technique seems to be very effective in disrupting the subject's normal image of his body. It then guides and strengthens his own imagery while keeping his body calm and relaxed.

Robert Monroe's Method

In his book *Journeys out of the Body* [Mon71] Monroe describes a complicated-sounding technique for inducing OBEs. In part it is similar to other imagination methods, but it starts with induction of the 'vibrational state.' Many spontaneous OBEs start with a feeling of shaking or vibrating, and Monroe deliberately induces this state first. He suggests you do the following. First lie down in a darkened room in any comfortable position, but with your head pointing to magnetic north. Loosen clothing and remove any jewelry or metal objects, but be sure to stay warm. Ensure that you will not be disturbed and are not under any limitation of time. Begin by relaxing and then repeat to yourself five times, 'I will consciously perceive and remember all that I encounter during this relaxation procedure. I will recall in detail when I am completely awake only those matters which will be beneficial to my physical and mental being.' Then begin breathing through your half-open mouth.

The next step involves entering the state bordering sleep (the hypnagogic state). Monroe does not recommend any particular method of achieving this state. One method you might try is to hold your forearm up, while keeping your upper arm on the bed, or ground. As you start to fall asleep, your arm will fall, and you will awaken again. With practice you can learn to control the hypnagogic state without using your arm. Another method is to concentrate on an object. When other images start to enter your thoughts, you have entered the hypnagogic state. Passively watch these images. This will also help you maintain this state of near-sleep. Monroe calls this Condition A.

After first achieving this state Monroe recommends to deepen it. Begin to clear your mind and observe your field of vision through your closed eyes. Do nothing more for a while. Simply look

through your closed eyelids at the blackness in front of you. After a while, you may notice light patterns. These are simply neural discharges and they have no specific effect. Ignore them. When they cease, one has entered what Monroe calls Condition B. From here, one must enter an even deeper state of relaxation which Monroe calls Condition C -- a state of such relaxation that you lose all awareness of the body and sensory stimulation. You are almost in a void in which your only source of stimulation will be your own thoughts. The ideal state for leaving your body is Condition D. This is Condition C when it is voluntarily induced from a rested and refreshed condition and is not the effect of normal fatigue. To achieve Condition D, Monroe suggests that you practice entering it in the morning or after a short nap.

With eyes closed look into the blackness at a spot about a foot from your forehead, concentrating your consciousness on that point. Move it gradually to three feet away, then six, and then turn it 90 degrees upward, reaching above your head. Monroe orders you to reach for the vibrations at that spot and then mentally pull them into your head. He explains how to recognize them when they occur. 'It is as if a surging, hissing, rhythmically pulsating wave of fiery sparks comes roaring into your head. From there it seems to sweep throughout your body, making it rigid and immobile.' This method is easier than it sounds.

Once you have achieved the vibrational state you have to learn to control it, to smooth out the vibrations by 'pulsing' them. At this point, Monroe warns it is impossible to turn back. He suggests reaching out an arm to grasp some object which you know is out of normal reach. Feel the object and then let your hand pass through it, before bringing it back, stopping the vibrations and checking the details and location of the object. This exercise will prepare you for full separation.

To leave the body Monroe advocates the 'lift-out' method. To employ this method think of getting lighter and of how nice it would be to float upwards. An alternative is the 'rotation' technique in which you turn over in bed, twisting first the top of the body, head and shoulders until you turn right over and float upwards. Later you can explore further. With sufficient practice Monroe claims that a wide variety of experiences are yours for the taking.

Ritual Magic Methods

Most magical methods are also based on imagery or visualization and use concentration and relaxation. All these methods require good mental control and a sound knowledge of the system being used, with its tools and symbols. Charles Tart, in introducing the concept of 'state specific sciences' [Tar72b] also considered state specific technologies, that is, means of achieving, controlling and using altered states of consciousness. Many magical rituals are really just such technologies. In a typical exercise the magician will perform an opening ritual, a cleansing or purifying ritual and then one to pass from one state to another. Once in the state

required he operates using the rules of that state and then returns, closes the door that was opened and ends the ritual.

This technology varies almost as much as the theory, for there are a multitude of ways of reaching the astral. One can use elemental doorways, treat the cards of the tarot as stepping stones, perform cabballistic path- workings or use mantras. The techniques are very similar to all others we have been considering, so we can see the complexities of ritual magic as just another related way achieving the same ends.

Meditation and Chakra Meditation

Meditation has two basic functions -- achieving relaxation and improving concentration. Therefore the ideal state for OBE is familiar to meditators and indeed OBEs have occasionally been reported during meditation and yoga. The two main types of meditation are concentration meditation (focusing) and insight meditation (mindfullness). Most kinds of meditation are the concentrative type. One simply focuses his attention upon a single physical object, such as a candle flame; upon a sensation, such as that felt while walking or breathing; upon an emotion, such as reverence or love; upon a mantra spoken aloud or even silently; or upon a visualization as in chakra meditation. Concentration meditation is, simply put, a form of self-hypnosis. The other main type of meditation, insight meditation, is the analysis of thoughts and feelings in such a way as to cause realization of the subjectivity and illusion of experience. Such meditation is done in an effort to attain transcendental awareness.

Chakra meditation is a special type of concentrative meditation which is basically kundalini yoga -- the practice of causing psychic energy (kundalini) to flow up sushumna, energizing the various chakras along the way. A chakra is 'a sense organ of the ethereal body, visible only to a clairvoyant' [Gay74]. As each chakra is energized by this practice, it is believed to add occult powers (sidhis), until at last the crown chakra is reached, and with it, full enlightenment is attained.

According to East Indian philosophy, man possesses seven major chakras or psychic centers on his body. In theosophical scheme there are ten chakras, which permit those trained in their use to gain knowledge of the astral world (three of the ten are used in black magic only). Each of the chakras forms a bridge, link, or energy transformer; changing pure (higher) energy into various forms, and connecting different bodies together. The chakras are located along the nadis (a network of psychic nerves or channels) and follow the autonomic nervous system along the spinal cord.

The first chakra, located at the base of the spine at the perineum is the root chakra, muladhara. The second charka, known as the sacral center, svadhishthana, is located above and behind the genitals. Third of the chakras is the solar plexus, manipura, located at the navel

and it is said to correspond with the emotions and also with psychic sight (clairvoyance). The heart chakra, anahata, is the fourth chakra, located over the heart and corresponding with the psychic touch. The fifth chakra is the throat chakra, vishuddha, located at the base of the throat (thyroid) and corresponding with psychic hearing (clairaudience).

The remaining two chakras are believed to relate mostly to elevated states of consciousness. The frontal chakra, (or 'third eye') ajna, the sixth chakra, is located between, and slightly above, the eyebrows. Ajna is the center of psychic powers and it is believed to be able to produce many psychic effects. Finally, the crown chakra, sahasrara, located atop the head, (pineal gland) is the seventh chakra. It is referred to as the thousand-petaled lotus and corresponds with astral projection and enlightenment.

To practice this chakra meditation, you simply concentrate on the chakras, beginning with the root chakra, and moving progressively up, as you visualize psychic energy from the root chakra traveling up shushumna and vivifying each higher chakra. As mentioned above the chakras have certain properties associated with them, so that this type of visualization may 'raise consciousness,' promote astral projection, and other things -- once you have reached ajna and eventually the crown chakra.

Hypnosis

In the early days of psychical research hypnosis was used a great deal more than now to bring about 'traveling clairvoyance,' but it can still be used. All that is required is skilled hypnotist with some understanding of the state into which he wants to put the subject, and a willing subject. The subject must be put into a fairly deep hypnotic state and then the hypnotist can suggest to him that he leaves his body. The subject can be asked to lift up out of his body, to create a double and step into it, to roll off his bed or chair, or leave through the top of his head. He can then be asked to travel to any place desired, but hypnotist must be sure to specify very clearly where he is to go, and to bring him safely back to his body when expedition is over. If this is not done the subject may have difficulty reorientating himself afterwards.

Drugs

There are some drugs which can undoubtedly help initiate an OBE. Hallucinogens have long been used in various cultures to induce states like OBEs, and in our own culture OBEs are sometimes an accidental product of a drug experience. In absence of any further information we might already be able to guess which are the sorts of drugs likely to have this effect. They might be those which physically relax the subject while leaving his consciousness clear and alert. Drugs which distort sensory input and disrupt the subject's sense of where and what shape his body is ought to help, and so may anything which induces a sense of shaking or

vibration. Imagery must be intensified without control being lost and finally there must be some reason, or wish, for leaving the body.

Considering these points hallucinogens might be expected to be more effective than stimulants, tranquillizers or sedatives. The latter may aid relaxation but help with none of the other features just mentioned. Few other types of drug have any relevant effect. This fact fits with what is known about the effectiveness of drugs for inducing OBEs. Monroe states that barbiturates and alcohol are harmful to the ability, and this makes sense since they would tend to reduce control over imagery even though they are relaxing. Eastman [Eas62] states that barbiturates do not lead OBEs whereas morphine, ether, chloroform, major hallucinogens and hashish can.

Relatively little research has carried out in this area, partly because most of the relevant drugs are illegal in the countries where that research might be carried out. It seems that certain drugs can facilitate an OBE but what is not clear is why drug experience should take that form rather than any other. Part of the answer is that usually it does not. There is no specific OBE-creating drug, and OBEs are relatively rarely a part of a psychedelic drug experience. Drugs may help in inducing the OBE but they are not recommended as a route to the instant projection, they are no alternative to learning the skills of relaxation, concentration, and imagery control.

Dream Development

Many OBEs start from dreams and since, by definition, one has to be conscious to have an OBE, they tend to start from lucid dreams. The dreamer may become aware that he is dreaming and then find himself in some place other than his bed and able to move about at will. He may have another body and may even attempt to see his physical body lying asleep. This topic is covered separately in the later section on lucid dreams.

Palmer's Experimental Method

In the search for a simple and effective method of inducing an OBE Palmer and his colleagues [PL75a, 75b, 76, PV74a, 74b] use relaxation and audio- visual stimulation. Subjects went through a progressive muscular relaxation session and the heard oscillating tones and watched a rotating spiral. One of the interesting findings was that many of the subjects claimed that they had been 'literally out of' their bodies, and there were indications that their experiences were very different in some ways from those encountered in OBEs.

What are lucid dreams?

The term lucid dreaming refers to dreaming while knowing that you are dreaming. It was coined by the Dutch psychiatrist Frederik van Eeden in 1913. It is something of a misnomer since it means something quite different from just clear or vivid dreaming. Nevertheless we are

certainly stuck with it. That lucid dreams are different from ordinary dreams is obvious as soon as you have one. The experience is something like waking up in your dreams. It is as though you 'come to' and find you are dreaming. This experience generally happens when you realize during the course of a dream that you are dreaming, perhaps because something weird occurs. Most people who remember their dreams have had such an experience at some time, often waking up immediately after the realization. However, it is possible to continue in the dream while remaining fully aware that you are dreaming.

One distinct and confusing form of lucid dreams are false awakenings. You dream of waking up but in fact, of course, are still asleep. Van Eeden [Van13] called these 'wrong waking up' and described them as 'demoniacal, uncanny, and very vivid and bright, with ... a strong diabolical light.' The one positive benefit of false awakenings is that they can sometimes be used to induce OBEs. Indeed, Oliver Fox [Fox62] recommends using false awakenings as a method for achieving the OBE. For many people OBEs and lucid dreams are practically indistinguishable. If you dream of leaving your body, the experience is much the same.

LaBerge's studies of physiology of the initiation of lucidity in the dream state have revealed that lucid dreams have two ways of starting. In the much more common variety, the 'dream-initiated lucid dream' (DILD), the dreamer acquires awareness of being in a dream while fully involved in it. DILDs occur when dreamers are right in the middle of REM sleep, showing lots of the characteristic rapid eye movements. DILDs account for about four out of every five lucid dreams that the dreamers have had in the laboratory. In the other 20 percent, the dreamers report awakening from a dream and then returning to the dream state with unbroken awareness -- one moment they are aware that they are awake in bed in the sleep laboratory, and the next moment, they are aware that they have entered a dream and are no longer perceiving the room around them. These are called 'wake initiated lucid dreams' (WILDs).

For many people, having lucid dreams is fun, and they want to learn how to have more or to how to induce them at will. One finding from early experimental work was that high levels of physical (and emotional) activity during the day tend to precede lucidity at night. Waking during the night and carrying out some kind of activity before falling asleep again can also encourage a lucid dream during the next REM period and is the basis of some induction techniques. Many methods have been developed and they roughly fall into three categories. One of the best known techniques for stimulating lucid dreams is LaBerge's MILD (Mnemonic Induction of Lucid Dreaming). This technique is practiced on waking in the early morning from a dream. You should wake up fully, engage in some activity like reading or walking about, and then lie down to go to sleep again. Then you must imagine yourself asleep and dreaming, rehearse the dream from which you woke, and remind yourself, 'Next time I have this dream, I want to remember I'm dreaming.'

A second approach involves constantly reminding yourself to become lucid throughout the day rather than the night. This is based on the idea that we spend most of our time in a kind of waking daze. If we could be more lucid in waking life, perhaps we could be more lucid while dreaming. German psychologist Paul Tholey [Tho83] suggests asking yourself many times every day, 'Am I dreaming or not?' This exercise might sound easy, but is not. It takes a lot of determination and persistence not to forget all about it. For those who do forget, French researcher Clerc suggests writing a large 'C' on your hand (for 'conscious') to remind you [GB89]. This kind of method is similar to the age-old technique for increasing awareness by meditation and mindfulness.

The third and final approach requires a variety of gadgets. The idea is to use some sort of external signal to remind people, while they are actually in REM sleep, that they are dreaming. Hearne first tried spraying water onto sleepers' faces or hands but found it too unreliable. This sometimes caused them to incorporate water imagery into their dreams, but they rarely became lucid. He eventually decided to use a mild electrical shock to the wrist. His 'dream machine' detects changes in breathing rate (which accompany the onset of REM) and then automatically delivers a shock to the wrist [Hea90].

Meanwhile, in California, LaBerge [LaB85] was rejecting taped voices and vibrations and working instead with flashing lights. The original version of a lucid dream-inducing device which he developed was laboratory based and used a personal computer to detect the eye movements of REM sleep and to turn on flashing lights whenever the REMs reached a certain level. Eventually, however, all the circuitry was incorporated into a pair of goggles. The idea is to put the goggles on at night, and the lights will flash only when you are asleep and dreaming. The user can even control the level of eye movements at which the lights begin to flash. The newest version has a chip incorporated into the goggles, which will not only control the lights but will store data on eye-movement density during the night as well as information about when and for how long the lights were flashing, making fine tuning possible.

There are two reasons for associating lucid dreams with OBEs. First, recent research suggests that the same people tend to have both lucid dreams and OBEs [Bla88, Irw88]. Second, as Green pointed out [Gre68b] it is hard to know where to draw the line between an OBE and a lucid dream. In both, the person seems to be perceiving a consistent world. Also the subject, unlike in an ordinary dream, is well aware that he is in some altered state and is able to comment on and even control the experience. Green refers to all such states as 'metachoric experiences.' It is possible to draw a line between these two experiences, but the important point to realize is that that line is not clear, and the two have much in common.

But there is an important difference between lucid dreams and the other states. In the lucid dream one has insight into the state (in fact that fact defines the state). In false awakening, one does not have such insight (again by definition). In typical OBEs, people feel that they have

really left their bodies. Those experiencing NDEs may have a sense of rushing down a long tunnel, which some perceive as being an entryway into a world beyond death. It is only in the lucid dream that one realizes it is a dream.

Just as in the case of OBEs, surveys can tell us how common lucid dreams are and who has them. Blackmore estimates that about 50 percent of people have had at least one lucid dream in their lives [Bla91]. Green [Gre66] found that 73% of student sample answered 'yes' to the question, 'Have you ever had a dream in which you were aware that you were dreaming?' Palmer found that 56% of the townspeople and 71% of the students in his sample reported that they had had lucid dreams and many of these claimed to have them regularly [Pal79b]. Blackmore found that 79% of the Surrey students she interviewed had them [Bla82]. Beyond producing these kinds of results, it does not seem that surveys can find out much. There are no very consistent differences between lucid dreamers and others in terms of age, sex, education, and so on [GL88]. All these surveys seem to agree quite closely, showing that the lucid dream is a rather common experience -- far more common than the OBE.

What is the physiology of dreams and lucid dreams?

The electrical activity of the brain has been observed and classified with EEG (electroencephalograph) equipment; signals are picked up from the scalp by electrodes, then filtered and amplified to drive a graph recorder. Brain activity has been found to produce specific ranges for certain basic states of consciousness, as indicated in 'Hz' (Hertz, or cycles/vibrations per second): delta -- 0.2 to 3.5 Hz (deep sleep, trance state) theta -- 3.5 to 7.5 Hz (day dreaming, memory) alpha -- 7.5 to 13 Hz (tranquility, heightened awareness, meditation) beta -- 13 to 28 Hz (tension, 'normal' consciousness)

In the drowsy state before falling asleep, the EEG is characterized by many alpha waves while the muscles start to relax. Gradually this state gives way to Stage 1 sleep. Three more stages follow, each having different EEG patterns and marked by successively deeper states of relaxation. By Stage 4 the sleeper is very relaxed, his breathing is slower, and skin resistance high. He is very hard to wake up. If the dreamer is awakened, he may say that he was thinking about something or he may describe some vague imagery, but he will rarely recount anything which sounds like a typical dream.

But this is not all there is to sleep -- increasing oblivion. In a normal night's sleep, a distinct change takes place an hour or two after the onset of sleep. Although the muscles are still relaxed, the sleeper may move, and from the EEG it appears that he is going to wake up and he returns to something resembling Stage 1 sleep. Yet he will still be very hard to wake up, and in this sense is fast asleep. The most distinctive feature, however, is the rapid eye movements, or REMs and the stage is also called REM-sleep. In earlier stages the eyes may

roll about slowly, now, however, they dart about as though watching something. If woken up now the sleeper will usually report that he was dreaming.

Lucid dreams implied that there could be consciousness during sleep, a claim many psychologists denied for more than 50 years. Orthodox sleep researchers argued that lucid dreams could not possibly be real dreams. If the accounts were valid, then the experiences must have occurred during brief moments of wakefulness or in the transition between waking and sleeping, not in the kind of deep sleep in which REMs and ordinary dreams usually occur. In other words, they could not really be dreams at all.

This contention presented a challenge to lucid dreamers who wanted to convince people that they really were awake in their dreams. But of course when you are deep asleep and dreaming you cannot shout, 'Hey! Listen to me. I'm dreaming right now.' During REM sleep, the muscles of the body, excluding the eye muscles and those responsible for circulation and respiration, are immobilized by orders from a nerve center in the lower brain. This fact prevents us from acting out our dreams. Occasionally, this paralysis turns on or remains active while the person's mind is fully awake and aware of the world.

It was Keith Hearne [Hea78], of the University of Hull, who first exploited the fact that not all the muscles are paralyzed. In REM sleep the eyes move. So perhaps a lucid dreamer could signal by moving the eyes in a predetermined pattern. Lucid dreamer Alan Worsley first managed to do this in Hearne's laboratory. He decided to move his eyes left and right eight times in succession whenever he became lucid. Using a polygraph, Hearne could watch the eye movements for sign of the special signal. The answer was unambiguous. All the lucid dreams occurred in definite REM sleep. In other words they were, in this sense, true dreams.

A typical lucid dream lasted between two and five minutes, occurred at about 6.30 a.m., about 24 minutes into a REM period and towards the end of a 22-second REM burst. The nights on which lucid dreams occurred did not show a different sleep pattern from other nights, although they did tend to follow days of above average stimulation.

It is sometimes said that discoveries in science happen when the time is right for them. It was one of those odd things that at just the same time, but unbeknownst to Hearne, Stephen LaBerge, at Stanford University in California, was trying the same experiment. He too succeeded, but resistance to the idea was very strong. In 1980, both *Science* and *Nature* rejected his first paper on the discovery [LaB85]. It was only later that it became clear just how important this discovery had been.

Some conclusions can be drawn from this information. In both OBEs and lucid dreams, the person seems to have his waking consciousness, or something close to it. He is able to see clearly, but what he sees is not quite like the physical and it appears to have many of the properties of a dream world or imaginary world. But there are differences as well: the lucid

dream starts more often when the subject is asleep, and the dream world is less distinct and real than the OBE 'world,' allowing less control and freedom of movement; in addition, the person who has an OBE starting from the waking state never actually thinks he is dreaming. Most lucid dreams involve only the subject, but there are cases on record of 'meetings' in lucid dreams. The important question is whether the OBEer is observing the same world as the lucid dreamer. Are the two experiences essentially aspects of the same phenomenon?

According to Stephen LaBerge it seems possible that at least some OBEs arise from the same conditions as sleep paralysis, and that these two terms may actually be naming two aspects of the same phenomenon [LL91]. In his opinion the survey evidence favors this theory. There is also considerable evidence that people who tend to have OBEs also tend to have lucid dreams, flying and falling dreams, and the ability to control their dreams [Bla84, Gli89, Irw88]. Because of the strong connection between OBEs and lucid dreaming, some researchers in the area have suggested that OBEs are a type of lucid dream [Far76, Hon79, Sal82].

One problem with this argument is that although people who have OBEs are also likely to have lucid dreams, OBEs are far less frequent, and can happen to people who have never had lucid dreams. Furthermore, OBEs are quite plainly different from lucid dreams in that during a typical OBE the experient is convinced that the OBE is a real event happening in the physical world and not a dream, unlike a lucid dream, in which by definition the dreamer is certain that the event is a dream. There is an exception that connects the two experiences -- when we feel ourselves leaving the body, but also know that we are dreaming.

LaBerge organized a study which consisted of analysis of the data of 107 lucid dreams from a total of 14 different people. The physiological information that was collected included brain waves, eye-movements and chin muscle activity. In all cases, the dreamer signaled the beginning of the lucid dream by making a distinct pattern of eye movements. After verifying that all the lucid dreams had eye signals showing that they had happened in REM sleep, they were classified into DILDs and WILDs, based on how long the dreamers had been in REM sleep without awakening before becoming lucid, and on their report of either having realized they were dreaming while involved in a dream (DILD) or having entered the dream directly from waking while retaining lucidity (WILD). Alongside the physiological analysis each dream report was scored for the presence of various events that are typical of OBEs, such as feelings of body distortion (including paralysis and vibrations), floating or flying, references to being aware of being in bed, being asleep or lying down, and the sensation of leaving the body.

Ten of the 107 lucid dreams qualified as OBEs, because the dreamers reported feeling as if they had left their bodies in the dream. Twenty of the lucid dreams were WILDs, and 87 were DILDs. Five of the OBEs were WILDs (28%) and five were DILDs (6%). Thus, OBEs were more than four times more likely in WILDs than in DILDs. The three OBE-related events which were looked for also all occurred more often in WILDs than in DILDs. Almost one third of

WILDs contained body distortions, and over a half of them included floating or flying or awareness of being in bed. This is in comparison to DILDs, of which less than one fifth involved body distortions, only one third included floating or flying, and one fifth contained awareness of bed.

The reports from the five DILDs that were classified as OBEs were actually much like those from the WILD-OBEs. In both the dreamers felt themselves lying in bed and experiencing strange sensations including paralysis and floating out-of-body. Although these lucid dreams sound like WILDs, they were classified as DILDs because the physiological records showed no awakenings preceding lucidity. However, it is possible that these people could have momentarily become aware of their environments (and hence been 'awake') while continuing to show the brainwaves normally associated with REM sleep.

The laboratory studies show that when OBEs happen in lucid dreams they happen either when a person re-enters REM sleep right after an awakening, or right after having become aware of being in bed. Could this relationship apply to OBEs and lucid dreams that people experience at home, in the 'real world'?

Not being able to take the sleep lab to the homes of hundreds of people LaBerge conducted a survey about OBEs and other dream-related experiences. The difference between his survey and previous ones is that in addition to asking if people had had OBEs, he asked specifically about certain events that are known to be associated with WILDs, namely, lucid dreaming, returning directly to a dream after awakening from it, and sleep paralysis.

A total of 572 people filled out the questionnaire. About a third of the group reported having had at least one OBE. Just over 80 percent had had lucid dreams. Sleep paralysis was reported by 37 percent and 85 percent had been able to return to a dream after awakening. People who reported more dream-related experiences also reported more OBEs. For example, of the 452 people claiming to have had lucid dreams, 39 percent also reported OBEs, whereas only 15 percent of those who did not claim lucid dreams said they had had OBEs. The group with the most people reporting OBEs (51%) were those who said they had experienced lucid dreams, dream return, and sleep paralysis.

In this survey, people reporting frequent dream return also tended to report frequent lucid dreams. Thus, LaBerge believes that the fact that dream return frequency is linked with OBE frequency in this study gives further support to the laboratory research finding that WILDs were associated with OBEs. On the other hand he stresses that the proof that some or even most OBEs are dreams is not enough to allow us to say that a genuine OBE is impossible. However, he suggests that if you have an OBE, why not test to see if the OBE-world passes the reality test. Is the room you are in the one you are actually sleeping in? If you have left your body, where is it? Do things change when you are not looking at them (or when you are)? Can you

read something twice and have it remain the same on both readings? LaBerge asks 'If any of your questions and investigations leave you doubting that you are in the physical world, is it not logical to believe you are dreaming?' [LL91].

What is the physiology of OBEs?

Clearly there are similarities between OBEs and dreams. In both we experience a world in which imagination plays a great part and we can perform feats not possible in everyday life. But the OBE differs in many important and obvious ways from what we have called an ordinary dream. For a start, it usually occurs when the subject is awake, or at least if drowsy or drugged, not sleeping. Second, the imagery and activities of an OBE are usually much less bizarre and more coherent than those of an ordinary dream, and most often the scenery is something from the normal environment rather than the peculiar setting of dreams. Third, OBEers are often adamant that their experience was nothing like a dream. Finally, there is the great difference in the state of consciousness. Ordinary dreams are characterized by very cloudy consciousness at best, and are only recognized as dreams on waking up.

But these differences are not enough. You may argue that in a lucid dream both the imagery and the state of consciousness are much more like those in an OBE. So perhaps the OBE is a kind of lucid dream occurring in the midst of waking life. One way to find out might be to determine the physiological state in which the OBE takes place. Such a finding can only be made by means of laboratory experiment; but first we need to catch an OBE in the laboratory.

Observing an OBE in the laboratory setting is not easy. Most people who have an OBE have only one, or at most few, in a lifetime. Capturing an OBE requires a special kind of subject, one who is both able to induce an OBE at will, and willing to be subjected to the stress of being tested. Fortunately there are such subjects.

One of the first to be tested was a young girl called Miss Z., by Charles Tart who studied her OBEs [Tar68]. Her OBEs all occurred at night. She used to wake up in the night and find herself floating near the ceiling. With Miss Z. as subject Tart initially wanted to test two aspects of the OBE: first, whether ESP could occur during an OBE, and second what physiological state was associated with the experience. Altogether, Miss Z. spent four non-consecutive nights sleeping at the lab.

During her first night Miss Z. had no OBEs. During the second night she woke twice and reported that she had been floating above her body. During the first experience Miss Z. had not yet fallen asleep when the OBE occurred, and the EEG showed a drowsy waking pattern followed by waking when she told Tart about the experience. All the time the heart rate had been steady and there were no REMs. Then at 3.15 a.m. Miss Z. woke up and called out 'write down 3.13.' Apparently she had left her body and lifted up high enough to see the clock on the

wall. At that time the EEG showed various patterns but predominantly theta and alphoid activity. There were few sleep spindles (a feature of the EEG pattern in certain stages of sleep), no REMs, no GSRs (galvanic skin response) and a steady heartbeat.

On the third night Miss Z. had a dramatic OBE. She seemed to be flying, and found herself at her home in Southern California, with her sister. Her sister got up from the rocking chair where she had been sitting and the two of them communicated without speaking. After a while they both walked into the bedroom and saw the sister's body lying in bed asleep. Almost as soon as she realized that it was time to go, the OBE was over and Miss Z. found herself back in the laboratory. Tart was not able to contact the sister to check whether she had been aware of the visit, but the physiological record showed that there was mostly alphoid activity with no REMs and only a couple of minutes of Stage 1, dreaming sleep, with REMs.

The last night was in some ways the most exciting, for on that occasion the subject was able to see an ESP target provided; but the EEG record was obscured by a lot of interference. Tart described it as somewhat like Stage 1 with REMs, but he added that he could not be sure whether it was a Stage 1 or a waking pattern.

Amongst all these confusing and changeable patterns, some certainty does emerge. In general the EEG showed a pattern most like poorly developed Stage 1 mixed with brief periods of wakefulness. For this subject at least OBEs do not occur in the same state as dreaming. Tart would have liked to have continued working with Miss Z. but this proved impossible as she had to return to Southern California.

However, Tart [Tar67] was able to work with another subject, Robert Monroe, well known from his books. Monroe was monitored for nine sessions with EEG and other devices. In this environment Monroe had difficulty inducing an OBE. Electrodes were clipped to his ear, and he found them very uncomfortable. During all the time that he was trying to have an OBE his EEG showed a strange mixture of patterns. There was unusually varied alpha rhythm, variable sleep spindles, and high voltage theta waves. On the whole Tart concluded that Monroe was in Stages 1 and 2 and was relaxed and drowsy, falling in and out of sleep. His sleep pattern was quite normal and he had normal dream periods and sleep cycle.

During the penultimate session Monroe managed to have an OBE. Tart concluded that Monroe's OBEs occurred in the dreaming state; but this idea presented him with a problem. Monroe claims that for him, dreaming and OBEs are entirely different. Tart finally concluded that perhaps the OBEs were a mixture of dreams and 'something else.' This 'something else' might, he thought, be ESP. One of the next subjects to be tested in this way was Ingo Swann. In several experiments at the ASPR [OM77] Swann was attached to the EEG equipment while he sat in a darkened room and tried to exteriorise, in his own time, and to travel to a distant room where ESP targets were set up. He did not fall asleep and was thus able to make

comments about how he was getting on. After some months of this type of experiment Swann suggested that he might be able to leave his body on command and so he was arranged to receive an audible signal to tell him when to go, and when to return. Apparently he succeeded in this effort, which meant that OBE and other times could easily be determined and compared.

During the OBE periods, the EEG was markedly flattened and there were frequency changes, with a decrease in alpha and increase in beta activity. While these changes took place, the heart rate stayed normal. These findings are rather different from those with previous subjects in that Swann seemed to be more alert during his OBEs. Perhaps this just confirms what was learned from case studies, that the OBE can occur in a variety of states. But perhaps most important is that in no case so far did there seem to be a discrete state in which the OBE took place. There were no sudden changes in either EEG or autonomic functions to mark the beginning or end of the OBE. Any changes were gradual; unlike dreaming, the OBE does not seem to be associated with a discrete physiological state.

The one other subject who has taken part in a large number of OBE experiments is Keith ('Blue') Harary. The experiments in which his physiological state was measured were carried out at the Physical Research Foundation [Mor73, HJH74, JHHLM74, MHJHR78]. The findings were different again from those of previous studies. Here there were no changes in EEG. The amount and frequency of alpha were the same in OBE and 'cool down' periods and there were only slightly fewer eye movements in the OBE phases. These measurements alone show that Harary was awake and that his OBEs did not occur in a sleeping, dreaming or borderline state.

Other measures did show a change. Skin potential fell; indicating greater relaxation, and it was this measure which provided the best indicator that an OBE had begun. Both heart rate and respiration increased. These changes are surprising because they imply a greater degree of arousal, the opposite of the finding from skin potential. So in some ways Harary was more relaxed, but he was also more alert.

Great differences between subjects tend to obscure any clear pattern in the states, but in all this confusion it is clear that the start of an OBE does not coincide with any abrupt physiological change. There is no discrete OBE state. The OBE does not; at least for these subjects, and under these conditions, occur in a state resembling dreaming. The subjects were relaxed, and even drowsy or lightly asleep, but they were not dreaming when they had their OBEs.

What are near-death experiences and are they some kind of OBEs?

Much publicity has recently been given to research on near-death experiences (NDEs), experiences of those who survive a close encounter with death. More people now survive

close brushes with death. The near-death experience has been defined as the 'experiential counterpart of the physiological transition to biological death' [Sab82]: it is the record of conscious experience from the inside rather than the outside, from the point of view of the subject rather the spectator.

Raymond Moody [Moo75, 77] interviewed many people who had been resuscitated after having had accidents and he then put together an idealized version of a typical near-death experience. He emphasized that no one person described the whole of this experience, but each feature was found in many of the stories. Here is his description:

A man is dying and, as he reaches the point of greatest physical distress, he hears himself pronounced dead by his doctor. He begins to hear an uncomfortable noise, a loud ringing or buzzing, and at the same time feels himself moving very rapidly through a long dark tunnel. After this, he suddenly finds himself outside of his own physical body, but still in the immediate physical environment, and he sees his own body from a distance, as though he is a spectator. He watches the resuscitation attempt from this unusual vantage point and is in a state of emotional upheaval.

After a while, he collects himself and becomes more accustomed to his odd condition. He notices that he still has a 'body,' but one of a very different nature and with very different powers from the physical body he has left behind. Soon other things begin to happen. Others come to meet and to help him. He glimpses the spirits of relatives and friends who have already died, and a loving, warm spirit of a kind he has never encountered before -- a being of light -- appears before him. This being asks him a question, non-verbally, to make him evaluate his life and helps him along by showing him a panoramic, instantaneous playback of the major events of his life. At some point he finds himself approaching some sort of barrier or border, apparently representing the limit between earthly life and the next life. Yet, he finds that he must go back to the earth, that the time for his death has not yet come. At this point he resists, for by now he is taken up with his experiences in the afterlife and does not want to return. He is overwhelmed by intense feelings of joy, love, and peace. Despite his attitude, though, he somehow reunites with his physical body and lives.

Later he tries to tell others, but he has trouble doing so. In the first place, he can find no human words adequate to describe these unearthly episodes. He also finds that others scoff, so he stops telling other people. Still, the experience affects his life profoundly especially his views about death and its relationship to life.

The parallel between this kind of account and many OBEs is clear. There is the tunnel traveled through as well as the experiences of seeing one's own body from outside and seeming to have some other kind of body, and the ineffability is familiar. One is tempted to conclude that in death a typical OBE, or astral projection, occurs, and is followed by a transition to another

world, with the aid of people who have already made the crossing, and that of higher beings in whose plane one is going to lead the next phase of existence. Although Moody's work gave a good idea of what dying could be like for some people, it did not begin to answer questions such as how common this type of experience is.

After Moody there have been studies by cardiologists Rawlings and Sabom. The most detailed research has been carried out by Kenneth Ring, a psychologist from Connecticut [Rin79, 80]. From hospitals there he obtained the names of people who had come close to death, or who had been resuscitated from clinical death. Almost half of his sample (48%) reported experiences which were, at least in part, similar to Moody's description. Of Ring's subjects, 95 per cent of those asked stated that the experience was not like a dream (the same result appears in Sabom): they stressed that it was too real, being more vivid and more realistic; however some aspects were hard to express, as the experience did not resemble anything that had happened to them before. One of Ring's most interesting findings concerned the stages of the experience. He showed that the earlier stages also tended to be reported more frequently. The first stage, peace, was experienced by 60% of his sample, some of whom did not reach any further stages. The next stage, of most interest to us here, was that of 'body separation,' in other words, the OBE. Thirty-seven per cent of Ring's sample reached this stage and what they reported sounds very similar to descriptions of OBEs. Not all the 'body separations' were distinct. Many of Ring's respondents simply described a feeling of being separate or detached from everything that was happening.

Ring tried to find out about two specific aspects of these OBEs. First he asked whether they had another body. The answer seemed to be 'no': most were unaware of any other body and answered that they were something like 'mind only.' There was a similar lack of descriptions of the 'silver cord.' We can see that an OBE of sorts forms an important stage in the near-death experience.

After the OBE stage comes 'entering the darkness' experienced by nearly a quarter of Ring's subjects. It was described as 'a journey into a black vastness without shape or dimension,' as 'a void, a nothing' and as 'very peaceful blackness.'

For fifteen per cent the next stage was reached, 'seeing the light.' The light was sometimes at the end of the tunnel, sometimes glimpsed in the distance but usually it was golden and bright without hurting the eyes. Sometimes the light was associated with a presence of some kind, or a voice telling the person to go back.

Finally there were ten per cent experiencers who seemed to 'enter the light' and pass into or just glimpse another world. This was described as a world of great beauty, with glorious colors, with meadows of golden grass, birds singing, or beautiful music. It was at this stage that

people were greeted by deceased relatives, and it was from this world that they did not want to come back.

A completely different kind of analysis was applied by Noyes and Kletti [Noy72, NK76] to accounts collected from victims of falls, drownings, accidents, serious illnesses, and other life-threatening situations. They emphasized such features as altered time perception and attention, feelings of unreality and loss of emotions, and the sense of detachment. They found that these features occurred more often in people who thought they were about to die than in those who did not. This fitted their interpretation of the experiences as a form of depersonalization (i.e., the loss of the sense of personal identity or the sensation of being without material existence) in the face of a threat to life; that is as a way of escaping or becoming dissociated from the imminent death of the physical body.

Two other aspects have yet to be dealt with. First, there is the absence of any trips to 'hell.' Neither Moody nor Ring obtained any accounts of hellish experiences. However, cardiologist Maurice Rawlings [Raw78] has suggested that the reason for there being no such reports is that although patients may recall such hellish experiences immediately afterwards, they tend to forget them with time. In other words, their memories protect them from recalling the unpleasant aspects. According to Rawlings it is only because they have been interviewed too long after the brush with death that all the experiences are reported as pleasant. It does seem to be the 'good' side of experiences which makes the greater impact.

Another feature which needs mention is the 'life review.' It has often been found that a person close to death may seem to see scenes of his past life pass before him as though on a screen, or in pictures. Ring found that about a quarter of his core-experiencers reported a life review, and that it was more common in accident victims than others.

The general effects of undergoing an NDE are of two kinds: philosophical and ethical. The main philosophical changes are in attitudes towards death and afterlife. Sabom's figures are extremely interesting in this respect: he asked those who had and those who had not had an NDE when unconscious whether there was any change in their views of death and the afterlife. Of the 45 who had not had any conscious experience, 39 were just as afraid of death as before, 5 more afraid and 1 less afraid; while of the 61 with an NDE none were more afraid, 11 just as afraid and 50 less afraid. The patterns were similar concerning belief in an afterlife: of the non-experiencers, none had any change of attitude; while of the experiencers, 14 found their attitude unchanged and 47 stated that their belief in the afterlife had increased [Sab82]. Ring found a correlation between loss of fear of death and what he called the core experience, broadly that with a positive transcendental element in it. Moody comments that there is remarkable agreement about the 'lessons' brought back from NDEs: 'Almost everyone has stressed the importance in this life of trying to cultivate love for others, a love of a unique and

profound kind' [Moo75]. And he adds that a second characteristic is a realization of the importance of seeking knowledge, of not confining one's horizon to the material.

A number of reductionist physiological explanations have been advanced to account for NDEs: the two most common are 'cerebral anoxia' and 'depersonalization'. Cerebral anoxia accounts for the experience by saying that it is a hallucination due to an oxygen shortage in the brain. We have seen that such 'hallucinations' frequently turn out to correspond to the physical events actually occurring -- can the NDE therefore be labelled a hallucination? Perhaps it can, but certainly not as a delusion. Ring and Moody both point out that patterns of experiences are no different when there is clearly no shortage of oxygen. Noyes starts by pointing out that none of the subjects can really have been dead if they were resuscitated, so that their reported experiences cannot be taken as 'proof' of survival of consciousness. Moody never actually states such a position, but rather confines himself to asserting that the experiences have a suggestive value; even if for the subjects themselves the experience is proof.

The common factor underlying all the physiological explanations of the NDE is the attempt to avoid the *prima facie* interpretation of the experience as an OBE. Sabom concludes that this hypothesis is the best fit with the data, while Ring concludes that 'there is abundant empirical evidence pointing to the reality of out-of-body experiences; that such experiences conform to the descriptions given by our near-death experiencers; and that there is highly suggestive evidence that death involves the separation of a second body -- a double -- from the physical body' [Rin80].

Just as many different interpretations have been presented for all aspects of the near-death experience. The most important of them have been usefully summarised by Grosso [Gro81]. Most people seem to agree that the near-death experience presents remarkable consistency varying little across differences in culture, religion, and cause of the crisis; what is in dispute is why there should be such a consistency. Rawlings steeps all his findings in the language of Christianity, involving heaven and hell and the possibility of being saved. Noyes interprets NDEs in terms of depersonalization; Siegel in terms of hallucinations, and Ring, within a parapsychological-holographic model. But broadly speaking there are two camps. On the other side are those who see the near-death experience as a sure signpost towards another world and a life after death; on the other, those who have, in various different ways, interpreted the experience as part of life, not death, and as telling us nothing whatsoever about a 'life after life.'

Is the OBE some kind of mental illness?

If the OBE is to be seen as involving psychological processes, rather than paranormal ones, we need to look at what those processes could be. Let us begin with a psychiatric approach and ask whether the OBE, or anything like it, is found in any mental illness.

Noyes and Kletti likened near-death experiences to the phenomenon of depersonalization. Related to depersonalization is derealization, in which the surroundings and environment begin to seem unreal and the sufferer seems to be cut off from reality. Depersonalization is the more common of the two, and involves feelings that the person's own body is foreign or does not belong. He may complain that he does not feel emotions even though he appears to express them, and he may suffer anxiety, distortions of time and place, and changes in his body image, and the subject may seem to observe things from a few feet ahead of his body. His conscious 'I-ness' is said to be outside his body. The patients characterize their imagery as pale and colorless, and some complain that they have altogether lost the power of imagination.

This description does not sound like that of someone who has had an OBE or a NDE. There are distortions of the environment and alterations in imagery in OBE and NDE experiences, but it seems that imagery typically becomes more bright and vivid, colorful and detailed, rather than pale and colorless. There are changes in the emotions -- but rather than a perishing of love and hate, many OBEers report deep love and joy and positive emotions. The phenomena of derealization and depersonalization do not in the least help us to understand. Any small similarities are outweighed by overwhelming differences.

One syndrome specifically involving doubles is the unusual 'Capgras syndrome.' A person suffering from this illusion may believe that a friend or relative has been replaced by an exact double. Since this double is like the real person in every discernible way, nothing that the 'real person' says or does will convince the patient otherwise. In this way the patient can avoid the guilt he feels at any malicious or negative feelings towards a loved one. From even this very brief description it is obvious that this illusion bears no resemblance to the OBE. More relevant may be the kinds of double seen in autoscopy, literally 'seeing oneself.' Although the OBE is rarely distinguished from autoscopy in the psychiatric literature, other distinctions are made instead. The main distinction is that OBE involves feeling of being outside the body while autoscopy usually consist of seeing a double. Some people see the whole of their body as a double; some see only parts, perhaps only the face. There is an internal form in which the subject can see his internal organs; and a cenesthetic form in which he does not see, but only feels the presence of his double. There is even a negative form in which the subject cannot see himself even when he tries to look into a mirror.

An entirely different way of looking at autoscopy is through the physical problems with which it is sometimes associated. One of these is migraine, the most obvious symptom of which is the debilitating headache. During, before or after the pain some migraine sufferers apparently experience autoscopy. In any case, a number of examples of people who have suffered both migraine and a simultaneous experience of either autoscopy or an OBE, does not prove any particular kind of connection between the two.

Are people who have greater imagery skills more likely to have OBEs?

OBEs might be expected to be more frequently experienced by people with the most highly developed skills of conceiving mental images if the experience is one constructed entirely from the imagination. Irwin [Irwin80, 81b] was interested in whether OBEers differ from other people in terms of certain cognitive skills or ways of thinking, including imagery. He found 21 OBEers and to these he gave the 'Ways of thinking questionnaire' (WOT), the 'Differential personality questionnaire' (DPQ) and the 'Vividness of visual imagery questionnaire' (VVIQ). For each he compared the scores of the OBEers with those expected from studies of larger groups of the population.

The imagery questionnaire a self-rated measure of vividness of just visual imagery. The scores of these few OBEers were unexpectedly found to be lower than normal, and significantly so. It seems that they had less, not more, vivid imagery than the average. The next test, the WOT, aims to test the verbalizer-visualizer dimension of cognitive style. Irwin's OBEers obtained scores no different from the average. So there was no evidence that OBEers are either specially likely to use visualization or verbalization.

Although not directly relevant to the subject of imagery, the results of the DPQ were interesting. One of the various dimensions of cognitive style which it measures is 'Absorption.' This relates to a person's capacity to become absorbed in his experience. For example, someone who easily becomes immersed in nature, art or a good book or film or a computer game, to the exclusion of the outside world, would be one who scored highly on the scale of 'Absorption.' Irwin expected OBEers to be higher on this measure and that is what he found. His OBEers seemed to be better than average at becoming involved in their experiences.

Are OBEs some kind of hallucination?

There is no single accepted definition of hallucinations and it is not clear just how they relate to sensory perception, illusion, dreams and imagination. However, let us define an hallucination as an apparent perception of something not physically present, and add that it is not necessary for the hallucination to be thought 'real' to count. Into this category come a wide range of experiences occurring in people, not suffering from any mental or psychiatric disturbance. Visual imagery may occur just before going to sleep (hypnagogic), on first waking up (hypnopompic) or they may be induced by drugs, sensory deprivation, sleeplessness, or severe stress. They may take many forms, from simple shapes to complex scenes.

Although it is possible to have an hallucination involving almost any kind of imagery, it has long been known that there are remarkable similarities between the hallucinations of different people, under different circumstances. Hallucinations were first classified during the last

century during a period when many artists and writers experimented with hashish and opium as an aid to experiencing them. In 1926 Kluver began a series of investigations into the effects of mescaline and described four constant types. These were first the grating, lattice or chessboard, second the cobweb type, third the tunnel, cone or vessel, and fourth the spiral. As well as being constant features of mescaline intoxication in different people, Kluver found that these forms appeared in hallucinations induced by a wide variety of conditions.

In the 1960s, when many psychedelic drugs began to be extensively used for recreational purposes, research into their effects proliferated. Leary and others tried to develop methods by which intoxicated subjects could describe what was happening to them. Eventually Leary and Lindsley developed the 'experiential typewriter' with twenty keys representing different subjective states. Subjects were trained to use it but the relatively high doses of drugs used interfered with their ability to press the keys and so a better method was needed.

A decade later Siegel gave subjects marijuana, or THC, and asked them simply to report on what they saw. Even with untrained subjects he found remarkable consistencies in the hallucinations. In the early stages simple geometric forms predominated. There was often a bright light in the center of the field of vision which obscured central details but allowed images at the edges to be seen more clearly, and the location of this light created a tunnel-like perspective. Often the images seemed to pulsate and moved towards or away from the light in the center of the tunnel. At a later stage, the geometric forms were replaced by complex imagery including recognizable scenes with people and objects, sometimes with small animals or caricatures of people. Even in this stage there was much consistency, with images from memory playing a large part.

On the basis of this work Siegel constructed a list of eight forms, eight colors, and eight patterns of movement, and trained subjects to use them when given a variety of drugs (or a placebo) in controlled environment. With amphetamines and barbiturates the forms reported were mostly black and white forms moving aimlessly about, but with THC, psilocybin, LSD and mescaline the forms became more organized as the experience progressed. After 30 minutes there were more lattice and tunnel forms, and the colors shifted from blue to red, orange to yellow. Movement became more organized with explosive and rotational patterns. After 90 - 120 minutes most forms were lattice-tunnels; after that complex imagery began to appear with childhood memories and scenes, emotional memories and some fantastic scenes. But even these scenes often appeared in a lattice-tunnel framework. At the peak of the hallucinatory experience, subjects sometimes said that they had become part of the imagery. They stopped using similes and spoke of the images as real. Highly creative images were reported and the changes were very rapid. According to Siegel [Sie77] at this stage 'The subjects reported feeling dissociated from their bodies.'

The parallels between the drug-induced hallucinations and the typical spontaneous OBE should be obvious. Not only did some of the subjects in Siegel's experiments actually report OBEs, but there were the familiar tunnels and the bright lights so often associated with near-death experiences. There was also the 'realness' of everything seen; and the same drugs which elicited the hallucinations are those which are supposed to be conducive to OBEs.

There have been many suggestions as to why the tunnel form should be so common. It has sometimes been compared to the phenomenon of 'tunnel vision' in which the visual field is greatly narrowed, but usually in OBEs and hallucinations the apparent visual field is very wide; it is just formed like a tunnel. A more plausible alternative depends on the way in which retinal space is mapped on cortical space. If a straight line in the visual cortex of the brain represents a circular pattern on the retina then stimulation in a straight line occurring in states of cortical excitation could produce a sensation of concentric rings, or a tunnel form. This type of argument is important in understanding the visual illusions of migraine, in which excitations spread across parts of the cortex.

Another reasonable speculation is that the tunnel has something to do with constancy mechanisms. As objects move about, or we move relative to them, their projection on the retina changes shape and size. We have constancy mechanisms which compensate for this effect. For very large objects, distortions are necessarily a result of perspective, and yet we see buildings as having straight walls and roofs. If this mechanism acted inappropriately on internally generated spontaneous signals, it might produce a tunnel-like perspective, and any hallucinatory forms would also be seen against this distorted background.

In drug-induced hallucinations there may come a point at which the subject becomes part of the imagery and it seems quite real to him, even though it comes from his memory. The comparison with OBEs is interesting because one of the most consistent features of spontaneous OBEs is that the experiencers claim 'it all seemed so real.' If it were a kind of hallucination similar to these drug-induced ones then it would seem real. Put together the information from the subject's cognitive map in memory, and an hallucinatory state in which information from memory is experienced as though it were perceived, and you have a good many of the ingredients for a classical OBE.

But what of the differences between hallucinations and OBEs? You may point to the state of consciousness associated with the two and argue that OBEs often occur when the person claims to be wide awake, and thinking perfectly normally. But so can hallucinations. With certain drugs consciousness and thinking seem to be clearer than ever before, just as they often do in an OBE. An important difference is that in the OBE, the objects of perception are organized consistently as though they do constitute a stable, physical world. But such is not always the case; there are many cases which involve experiences beyond anything to be seen in the physical world. Consideration of imagery and hallucinations might provide some sort of

framework for understanding the OBE. It would be seen as just one form of a range of hallucinatory experiences. But (and this is a big but) if the OBE is basically an hallucination and nothing actually leaves the body, then paranormal events ought not necessarily to be associated with it. People ought not to be able to see distant unknown places or influence objects while 'out of the body'; yet there are many claims to such an effect.

What are the features of OB vision?

In the late 1960s Charles Tart began the first laboratory tests with subjects who could have OBEs voluntarily [Tar67, 68]. In addition to his physiological research he also tested subjects' ability to see a target hidden from their normal sight. His first subject, Miss Z., was tested in a laboratory where a target was placed on a shelf about five and a half feet above the bed where she lay. The target was a five-digit number prepared in advance by Tart and placed on the shelf. Miss Z. slept in the laboratory on four occasions. On the first she had no OBE; on the second, she managed to get high enough to see the clock, and on third night she had an OBE but traveled elsewhere. However, on her fourth and last night she awoke and reported that she had seen the number and it was 25132. She was right on all five digits which has a probability of only one in 100,000 of being right by chance.

Tart himself seemed reluctant to conclude that it was paranormal. Tart's second subject was Robert Monroe, who came to the laboratory for nine sessions, but he was only able to induce an OBE in the penultimate session, and then he had two. During the first of these OBEs he seemed to see a man and a woman but not to know who or where they were. In the second he made a great effort to stay 'local' and managed to see a technician, who was supposed to be monitoring the apparatus. With her he saw a man whom he did not know was there and whom he later described. It turned out that this was the husband of the technician, who had come to keep her company. Since Monroe did not manage to see the target number, no real test of ESP was possible.

In 1971 Karlis Osis began to plan OBE research at the American SPR. One of the first subjects to be tested there was Ingo Swann, who went to the laboratory two or three times a week where Janet Mitchell tested him to see whether he could identify a target placed out of sight. A platform was suspended from the ceiling about 10 feet above the ground and divided into two. On either side of a partition various objects were placed and Swann was asked to try to travel up to see them. The reason for the partition was to see whether Swann would identify the correct target for the position in which he claimed it to be. Bright colors and clear familiar shapes seemed most successful and glossy pictures or glass did not work well for the experimental purposes. After his OBE, Swann usually made drawings of what he had 'seen.' Although these drawings were far from perfect renderings of the original objects, they were similar enough that when eight sets of targets and respondes were given to an independent judge she correctly matched every pair; a result which is likely to happen by chance only once

in about 40,000 times [Mit73]. The results of all these experiments were most encouraging. From Tart's results especially it seemed that although it was very hard for the subject to get to see the number, and that if the number was seen, it was seen correctly. Further research showed that OB vision could be just as confused and erratic as ESP has always seemed to be. For example Osis [Osi73] advertised for people who could have OBEs to come to the ASPR for testing. About one hundred came forward and were asked to try to travel to a distant room and to report on what objects they could see there. Osis found that most of them thought they could see the target but most were wrong. He concluded that the vast majority of the experiences had nothing to do with bona fide OBEs. This conclusion means that Osis was using the ability to see correctly as a criterion for the occurrence of a genuine OBE.

Much of the recent research on OBEs has been directed towards that important question; does anything leave the body in an OBE? On the one hand are the 'ecsomatic' or 'extrasomatic' theories which claim that something does leave. This something might be the astral body of traditional theory or some other kind of entity. Morris [Mor73] has referred to the 'theta aspect' of man which may leave the body temporarily in an OBE, and permanently at death. On the other hand there are theories which claim that nothing leaves. Some of these predict that no paranormal events should occur during OBEs, but the major alternative to consider here is that nothing leaves, but the subject uses ESP to detect the target. This concept has been referred to as the 'imagination plus ESP' theory.

This last theory is problematic. The term ESP is a catch-all, is negatively defined, and is capable of subsuming almost any result one cares to mention. How then can it be ruled out? And given these two theories, how can we find out which, if either, is correct? In spite of the difficulties several parapsychologists have set about this task. Osis, for example, suggested that if the subject in an OBE has another body and is located at the distant position, then he should see things as though looking from that position. If he were using ESP he should see things as though with ESP.

This general idea led Osis to suggest placing a letter 'd' in such way that if seen directly (or presumably by ESP) a 'd' would be seen, but if looked from a designated position a 'p' would appear, reflected in a mirror. Following this idea further he developed his 'optical image device' which displays various pictures in several colors as in four quadrants. The final picture is put together using black and white outlines, a color wheel, and a series of mirrors. By, as it were, looking into the box by ESP one would not find the complete picture. To do so can only be achieved by looking in through the viewing window [Osi75].

Experiments with this device were carried out with Alex Tanous, a psychic from Maine. Tanous lay down in a soundproofed room and was asked to leave his body and go to the room containing the device, look in through the observation window and return to relate what he had seen. Osis recounts that at first Tanous did not succeed, but eventually he seemed to improve.

On each trial Tanous was told whether he was right or wrong and was thus able to look for criteria which might help to identify when he was succeeding. On those trials which he indicated he was most confident about, his results 'approached significance' on the color aspect of the target. Osis claimed that this aspect was most important for testing his theory because some of the colors were modified by the apparatus and would be very hard to get right by ESP. The next tests therefore used only a color wheel with three pictures and six colors. This time overall scores were not significant but high-confidence scores for the whole target were significant and in the second half of the experiment Tanous scored significantly on several target aspects, especially the one which Osis claimed required 'localized sensing.'

Blue Harary, who has provided so much interesting information about the physiology of the OBE, was tested for perception during his OBEs, but according to Rogo [Rog78c] he was only 'sporadically successful' on target studies and so research with him concentrated on other aspects of his experience.

Apart from all these experiments there is really only one more approach which is relevant to the question of ESP in OBEs and that is work done by Palmer and his associates at the University of Virginia in Charlottesville. They tried to develop methods for inducing an OBE in volunteer subjects in the laboratory and then to test their ESP. One can understand the potential advantages of such a program. If it were possible to take a volunteer and give him an OBE under controlled conditions, when and where you wanted it, half the problems of OBE research would be solved. It would be possible to test hypotheses about the OBE so much more quickly and easily, but alas, this approach turned to be fraught with various problems.

First Palmer and Vassar [PV74a, b] developed an induction technique based on traditional ideas of what conditions are conducive to the OBE. Using four different groups of subjects in three stages, the method was modified to incorporate different techniques for muscular relaxation and disorientation. Each subject was brought into the laboratory and the experiment was explained to him. He was then taken into an inner room to lie on a comfortable reclining chair and told that a target picture would be placed on a table in the outer room.

The stage of the induction consisted of nearly fifteen minutes of progressive muscular relaxation with the subject being asked to hear a pulsating tone both through headphones and speakers which served to eliminate extraneous noises and produce a disorientating effect. At the same time he looked into a rotating red and green spiral lit by a flashing light; this stage lasted a little under ten minutes. In the final stage he was asked to imagine leaving the chair and floating into the outer room to look at the target, but here several variations were introduced. Some subjects were guided through the whole process by taped instructions while others were simply allowed to keep watching the spiral while they imagined it for themselves. For some the spiral was also only imagined and for some there was an extra stage of imagining the target.

When the procedure was over the subject filled in a questionnaire about his experiences in the experiment and completed an imaginary test (a shortened form of the Betts QMI). Then five pictures were placed before him. One was the target, but neither he nor the experimenter with him knew which it was. When he had rated each of the pictures on a 1 to 30 scale, the other experimenter was called in to say which was the target.

One of the questions asked was, 'Did you at any time during the experiment have the feeling that you were literally outside of your physical body?' Of 50 subjects asked this question 21, or 42%, answered 'yes.' As for the scores on the targets, overall scores were not significantly different from chance expectation. When the scores were compared for the 21 OBEers and the others there was no significant difference between them. The OBEers did get significantly fewer hits than expected by chance, but this result difficult to interpret.

Palmer and Lieberman [PL75a, b] took the techniques a stage further. Forty subjects were tested, but this time they had a visual ganzfeld: that is, half ping-pong balls were fixed over their eyes and a light was shone on them so as to produce a homogenous visual field. Half the subjects were given an 'active set' by being asked to leave their bodies and travel to the other room to see the target, while the other half were given a 'passive set' being asked only to allow imagery to flow freely in their mind.

As expected more of the 'active' subjects reported having felt out of their bodies: 13 out of 20 as opposed to only 4 in the passive condition. The active subjects also reported more vivid imagery and more effort expended in trying to see the target, but when it came to the ESP scores both groups were found to have scores close to chance expectation and there were no significant differences between them. However, those subjects who reported OBEs did do better than the others and significantly so. This result is quite different from the previous ones and is the opposite of what Palmer and Lieberman predicted, but it is what one would expect on the hypothesis that having an OBE facilitates ESP.

Palmer and Lieberman put forward an interesting suggestion as to why more subjects in the active condition should report OBEs. Their idea is related to Schachter's theory of emotions, which has been very influential in psychology. This theory suggests that a person experiencing any emotion first feels the physiological effects of arousal, including such things as slight sweating, increased heart rate, tingling feelings, and so on, and then labels this feeling according to the situation as either 'anger,' 'passionate love,' 'fear' or whatever. In the case of these experiments the subject feels unusual sensations arising from the induction and then labels them according to his instructions. If he were told to imagine leaving his body and traveling another room he might interpret his feelings as those of leaving the body. Of course this suggestion has far wider implications for understanding the OBE than those relating to the evaluation of the results of these experiments.

In the next experiment Palmer and Lieberman tested 40 more subjects, incorporating suggestions from Robert Monroe's methods for inducing OBEs. There was no ganzfeld and instead of sitting in a chair the subjects lay on beds, sometimes with a vibrator attached to the springs. This time 21 subjects reported OBEs; and, interestingly, these score higher on the Barber suggestibility scale, but they did not have better ESP scores.

In the final experiment in this series 40 more subjects were tested, 20 with ganzfeld and 20 were just told to close their eyes [Pal79a]. This time 13 in each group claimed to have had an OBE, but whether they did or not was not related to their ESP scores. This time EEG recording was also used, but it showed no differences related to the reported OBEs. All in all it seems that these experiments were successful in helping subjects to have an experience which they labeled as out of the body, but not in getting improved ESP scores or in finding an OBE state identifiable by EEG.

In an experiment designed to look at the effect of religious belief on susceptibility to OBEs, Smith and Irwin [SI81] tried to induce OBEs in two groups of students differing in their concern with religious affairs and human immortality. The induction was similar to that already described, but in addition the subjects were given an 'OBE-ness' questionnaire and were asked to try to 'see' two targets in an adjacent room. Later their impressions were given a veridicality score for resemblance to the targets. No differences between the groups were found for either OBE-ness or veridicality, but there was a highly significant correlation between OBE-ness and veridicality. This result implies that the more OBE-like the experience, the better the ESP. All these experiments were aimed at finding out whether subjects could see a distant target during an OBE. Although the experimental OBE may differ from the spontaneous kind, a simple conclusion is possible from the experimental studies. That is, OBE vision, if it occurs, is extremely poor.

How can the OBE be explained?

Most theories of the OBE either claim that something leaves the physical body, or that it does not. Then within these two major categories there are several different types of explanation, and there is perhaps a last possibility; that any such distinction is meaningless and artificial. The theories can be divided up as follows [Bla82]:

A. Something leaves the body

- Physical theories
- Physical astral world theory
- Mental astral world theory

B. Nothing leaves the body

- Parapsychological theory
- Psychological theories

C. Other

Something Leaves the Body

Physical Theories

(a physical double travels in the physical world)" First there is the kind of explanation which suggests that we each have a second physical body which can separate from the usual one. There are two aspects to consider, one being the status and nature of the double which travels, and the other being the status and nature of the world in which it travels. In this theory both are material and interact with the normal physical world. You may immediately dismiss this notion, saying that the double is non-physical.

To make this theory even worth considering it is necessary to assume that this double is composed of some 'finer' or subtler material that is invisible to the untrained eye. This kind of idea is sometimes expressed in occult writings. The idea appears, for example, as the 'etheric body' of the Theosophists. Objections to this type of theory are numerous, and are made on both logical and empirical grounds. First, what could the double be made of? The possibilities seem to range between a complete solid duplicate and a kind of misty and insubstantial version. Another problem with this kind of double is its appearance. If all have a second body why does it appear to some as a blob or globe, to others as a flare, or light, and to yet others as a duplicate of the physical body? Muldoon and Carrington [MC29] wrestled with this problem and so has Tart [Tar74b].

If the notion of a physical double is problematic, the notion that it travels in the physical world is just as much so. First there are the types of errors made in OB perception. These tend not to be the sort of errors which might arise from a poor perceptual system, but seem often to be fabricated error, or additions, as well as omissions. Then sometimes the OB world is responsive to thought, just as in a dream the scenery can change if the person imagines it changing; and lastly, there is the fact that many OBEs merge into other kinds of experience. The OBEer may find himself seeing places such as never were on earth, or he may meet strange monsters, religious figures or caricature animals. All these features of the OBE make it harder to see the OB world as the physical world at all, and lead one to the conclusion that the OB world is more like a world of thoughts.

Physical Astral World Theory

(a non-physical double travels in the physical world)

Many theories have suggested that the double is not physical but non- physical, even though it travels in the physical world. Many occultists believe there to be a whole range of non-physical worlds of differing qualities. Let us look at some examples of this sort of theory to try to find out what is meant by it. Tart [Tar74b, 78] refers to it as the 'natural' explanation. He describes this theory of the OBE as follows '... in effect there is no need to explain it; it is just what it seems to be. Man has a non-physical soul of some sort that is capable, under certain conditions, of leaving the physical seat of consciousness. While it is like an ordinary physical body in some ways, it is not subject to most of the physical laws of space and time and so is able to travel at will.'

The 'theta aspect' has been mentioned in connection with detection experiments. Morris et. al. [MHJHR78] explain that '... the OBE may be more than a special psi-conductive state; they hold that it may in fact be evidence of an aspect of the self which is capable of surviving bodily death. For convenience, such a hypothetical aspect of the self will hereafter be referred to as a Theta Aspect (T.A.).' According to Osis and Mitchell [OM77] it is possible that '... some part of the personality is temporarily out of the body,' and many occult theories involve a non- physical astral double rather than a physical one.

Blackmore criticizes this view [Bla82]. She claims if the 'soul' is to interact with the objects of the physical world so as to perceive them then it should not only be detectable, but all the other problems of previous theories arise. On the other hand, if this 'soul' does not interact with the physical, then it cannot possibly do what is expected of it in this theory, namely travel in the physical world. She sees no escape from the dilemma. Moreover, she claims there is already evidence that what is seen in an OBE is not, in any case, the physical world.

Mental Astral World Theory

(a non-physical double travels in a non-physical, but 'objective,' astral world)

Each of the theories presented thus far support a conclusion that OBEs do not take place in the physical world at all, but in a thought-created or mental world. Each of the next three types of theory start from this premise, but they are very different and lead to totally different conceptions of the experience.

The term 'mental world' could mean several different things. It could mean the purely private world created by each of us in our thinking. One possibility is that there is another world (or worlds) which is mental but is in some sense shared, or objective and in which we can all travel if we attain certain states of consciousness. The important question now becomes whether the OB world is peculiar to each individual, or shared and accessible to all.

Occultists have suggested that there is a shared thought world. There are many other versions of this kind of theory. The pertinent features of this idea are that there is a non-physical OB

world which is accessible by thought, that it is manipulable by thought, and that it is the product of the mind of more than just one person.

Tart [74b, 78], as one of his five theories of the OBE, suggests what he calls the 'mentally-manipulatable-state explanation.' He raises here the familiar problem of, as he puts it 'where the pajamas come from.' That is, if the OBE involves the separation of a 'spirit' or 'soul' we have to include the possibility of spiritual dinner jackets and tie pins. Of course any theory which postulates 'thought created' world solves this problem. Tart therefore suggested that a non-physical second body travels in a non-physical world which is capable of being manipulated or changed by 'the conscious and non-conscious thoughts and desires of the person whose second body is in that space.'

In 1951 Muldoon and Carrington had come to a similar conclusion [MC51]. Muldoon states '... one thing is clear to me -- the clothing of the phantom is created, and is not a counterpart of the physical clothing.' Through his observations he came to the conclusion that 'Thought creates in the astral, ... In fact the whole astral world is governed by thought.' But he did not mean it was a private world of thoughts.

Also relevant here is the occult notion of thought forms. Theosophists Besant and Leadbeater describe the creation of thought forms by the mental and desire bodies, and their manifestations as floating forms in the mental and astral planes. All physical objects are supposed to have their astral counterparts and so when traveling in the astral one sees a mixture of the astral forms of physical things and thought created, or purely astral, entities.

There are other versions of a similar idea. For example Whiteman questions the 'one-space theory' of OBEs [Whi75], and Poynton follow him suggesting '... what is described is not the physical world as actualized by the senses of the physical body, but a copy, more or less exact, of the physical world' [Poy75]. Rogo [Rog78b] suggests that the OBE takes place in a non-physical duplicate world which is just as 'real' to the OBEer as our world is to us. The idea of shared thought world, attractive as it is, has some serious problems. The first problem relates to how the thoughts of different people could be combined together to create an astral world and the second problem concerns the storage of ideas. The idea that thoughts can persist independently of the brain has been a cornerstone of many occult theories, but also parapsychologists have used a similar idea to try to explain ESP.

According to Blackmore [Bla82] the problem is essentially one of coding. We know that when a person remembers something he has first processed the incoming information, thought about it, structured it, and turned it into a manageable form using some sort of code. We presume that the information persists in this form until needed when the person can use the same coding system to retrieve it and use it. Even if we don't understand the details of how this system works, there is in principle no problem for one person because he uses the same

system both in storing the material and retrieving it. But if thoughts are stored in the astral world, then we have to say that one person can store them there and another can get them out again. And that other person may have entirely different ways of coding information. So how can these thoughts in the astral possibly make sense to him?

Nothing Leaves the Body

Parapsychological Theory

(imagination plus ESP)

The OBE might involve only imaginary traveling in a private imaginary world. According to this type of theory, nothing leaves the body in an OBE. The advantage of such a theory is that it avoids all the problems of the previous ones since it involves no astral worlds and other bodies. Certain parapsychologists have tried to incorporate the evidence that ESP occurs during OBEs by suggesting that the OBE is 'imagination plus ESP' or PK. For example, one of Tarts's five theories is the 'hallucination-plus- psi explanation.' According to this theory, 'For those cases of OBEs in which veridical information about distant events is obtained, it is postulated that ESP, which is well proved, works on a nonconscious level, and this information is used by the subconscious mind to arrange the hallucinatory or dream scene so that it corresponds to the reality scene' [Tar78].

Osis [Osi75] contrasts his 'ecsomatic hypothesis' with 'traveling fantasy plus ESP' and Morris [MHJHR78] compares the theory that 'some tangible aspect of self can expand beyond the body' with what he call the 'psi- favorable state' theory. In parapsychology many states have been thought to be conducive to ESP. They include relaxation, the use of ganzfeld or unpatterned stimulation, and dreaming. There are many reasons why an OBE might be thought of as a psi-conductive state. Palmer suggested that it might induce attitudes and expectations consistent with psi, thereby facilitating its occurrence [Pal74].

This sort of theory is not satisfying. It appears to avoid all the previous problems and yet to be able to cope with the paranormal aspects of the experience. According to Blackmore 'Calling the OBE imagination or hallucination tells us very little, and adding the words 'plus ESP' adds nothing. We know little enough about ESP. It is defined negatively, and we cannot stop and start it or control it in any way.'

Psychological Theories

This theory amounts to the statement that all the details of the OBE are to be accounted for in psychological terms. Nothing leaves the body in an OBE, the astral body and astral world are products of the imagination and the OBE itself provides no hope for survival. Osis has called

the followers of such theories 'nothing but-ers,' reducing the OBE to 'nothing but a psychopathological oddity' [Osi81].

Among psychological approaches there have been psychoanalytic interpretations, analogies between the 'tunnel' and the birth experience; the creation of the double has been seen as an act of narcissism or as a way of denying the inevitable mortality of the human body. Then there have been theories which treat the near-death experience as a form of depersonalization or regression to primitive modes of thinking, and those which treat it as involving an archetype.

John Palmer used a mixture of psychological and psychoanalytical concepts in his account [Pal78a]. He made the crucial point that the OBE is neither potentially nor actually a psychic phenomenon. An OBE may be associated with psychic events but the experience itself, just like any other experience, is not the kind of thing which can be either psychic or not. He went on to suggest that the OBE almost always occurs in a hypnagogic state. Within this state it is triggered by a change in the person's body concept which results from a reduction or other change in proprioceptive stimulation. This change then threatens the self concept and the threat activates deep unconscious processes. These processes try to re-establish the person's sense of individual identity as quickly and economically as possible in a way that follows the laws of the Freudian primary process. According to Palmer it is this attempt to regain identity which constitutes the OBE.

Since the whole purpose of the OBE is to avoid a threat, the person will usually remain unaware of that threat and of the change in body image which precipitated it. However, Palmer adds that it is possible, with practice, to gain ego-control over the primary process activity. Of course the OBE is, at best, only a partial solution to the threat and both ego and primary process strive to regain the normal body concept. As soon as they succeed the OBE ends. For Palmer any psychic abilities which manifest themselves during an OBE do so more because of the hypnagogic state than because anything leaves the body.

This theory has much in its favor. It has no need of astral bodies or other worlds and so avoids all the problems of the earlier theories. It makes sense of the situations in which the OBE occurs, and the way it varies with the situation, and it relates the OBE to other experiences. However, the theory is not without its own problems. It depends heavily on the idea that the OBE is a means of avoiding a threat to the integrity of the individual and the anxiety which such a threat would arouse. But it is not clear that the OBE would not provide an even greater threat than the original change in body concepts. Sometimes OBEers are terrified that they will not be able to 'get back in' which is surely also a threat.

Susan Blackmore [Bla82] bases her theory on the claim that the evidence of paranormal events during the OBE is limited and unconvincing. She therefore asserts that the claims for ESP and PK in OBEs are not impossible but there is actually not very much evidence which

has to be 'explained away' in this fashion. Blackmore suggests that the OBE is best seen as an altered state of consciousness (ASC) and is best understood in relation to other ASCs.

Everything perceived in an OBE is a product of memory and imagination, and during the OBE one's own imagination is more vividly experienced than it is in everyday life. In other words the experience is a kind of privileged peek into the contents of one's own mind.

Blackmore suggests that in the case of the OBE the following are necessary: vivid and detailed imagery; low reality testing so that memories and images may seem 'real'; sensory input from the body reduced or not attended to; awareness and logical thinking maintained. She shows how these prerequisites can lead to an altered state of which one form is the semi-stable OBE and indicates related states, such as lucid dreaming, and shows how experience can change into others when conditions, or ways of thinking, change.

This theory accounts adequately for cases of so-called traveling clairvoyance, where the subject does not necessarily see his body, but is aware of a distant scene. It accounts less well for cases of conscious projection, where the subject feels himself to be at a distant location and is actually perceived by a person at that location. It also underestimates the veridical aspect of perception in cases where there is no apparent distortion by the imagination, in other words when the scene viewed from another point of space corresponds exactly with what one might expect to observe from that point; for instance a room seen from the vantage point of the ceiling. The question of perceptual distortion is related to the degree of interference by the imagination: the greater the imaginative element, the less veridical the perception of the place.

Stephen LaBerge describes a theory in which OBEs occur when people lose input from their sense organs, as happens at the onset of sleep, while retaining consciousness [LL91]. This combination of events is especially likely when a person passes directly from waking into REM sleep. In both states the mind is alert and active, but in waking it is processing sensory input from the outside world, while in dreaming it is creating a mental model independent of sensory input. This model includes a body. When dreaming, we generally experience ourselves in a body much like the 'real' one, because that is what we are used to. However, our internal senses reside in the physical body, which when we are awake inform us about our position in space and about the movement of our limbs. This information is cut off in REM sleep. Therefore, we can dream of doing all kinds of things with our dream bodies -- flying, dancing, running from monsters, being dismembered -- all while our physical bodies lie safely in bed.

During a WILD, or sleep paralysis, the awake and alert mind keeps up its good work of showing us the world it expects is out there -- although it can no longer sense it. So, then we are in a mental dream world. Possibly we feel the cessation of the sensation of gravity as that part of sensory input shuts down, and then feel that we are suddenly lighter and float up, rising from the place where we know our real body to be lying still. The room around us looks about the same as it would if we were awake, because such an image represents our brain's best

guess about where we are. If we did not know that we had just fallen asleep, we might well think that we were awake, still in touch with the physical world, and that something mighty strange was happening -- a departure of the mind from the physical body.

The unusual feeling of leaving the body is exciting and alarming. This, combined with the realistic imagery of the bedroom is enough to account for the conviction of many OBE experiencers' that 'it was too real to be a dream.' Dreams, too, can be astonishingly real, especially if you are attending to their realness. Usually, we pass through our dreams without thinking much about them, and upon awakening remember little of them. Hence, they seem 'unreal.' But waking life is also like that -- our memory for a typical, mundane day is flat and lacking in detail. It is only the novel, exciting, or frightening events that leave vivid impressions. If we stop what we are doing, we can look around and say, 'Yes, this world looks solid and real.' But, if you look back and try to recall, for instance, brushing your teeth this morning, your memory is likely to be vague and not very life-like. Contrast this kind of event to a past event that excited or alarmed you, which is likely to seem much more 'real' in retrospect.

Other approaches

Perhaps all the distinctions and problems are artificial, perhaps the mind is neither 'in' nor 'out' of the body. Grosso argues the possibility [Gro81] that one is always 'out' and in an OBE just becomes conscious of that fact. Should the distinction between normal and paranormal then be dropped?

Let us consider the state of affair that is considered normal: the 'in-the-body' experience. What does it mean to be in a body? LaBerge [LL91] argues that saying that one is in a body implies that the self is an object with definite borders capable of being contained by the boundaries of another object -- the physical body. However, we do not have any evidence that the self is such a concrete thing. What we think of as 'out-of-body' in an OBE is the experience of the self. This experience of being 'in' a body is normally based on perceptual input from the senses of both the world external to the body and the processes within the body. These things give us a sense of localization of the self in space. However, it is the body, and its sense organs, that occupy a specific locus, not the self. The self is not the body or the brain. If we think that the self is a product of brain function, even this does not make it reasonable to state that the self is in the brain -- is the meaning contained in these words in this page? It may not make any sense on an objective level to say that the self is anywhere. Rather, the self is where it feels itself to be. Its location is purely subjective and derived from input from the sensory organs.

Putting aside the question of the essential nature of the self, perception is undeniably a phenomenon tied to brain function. So, when we find ourselves experiencing a world that seems much like the one we are used to perceiving with our usual equipment -- eyes, ears, etc., all things linked to our brains, it would be logical to assume that it is our usual brain

creating the experience. And, if we were to really leave our bodies -- severing all connection with them -- it would be illogical to assume that we would see the world in the same way. Therefore, LaBerge points out, although no amount of contradictory evidence can rule out the possibility of a real 'out of body experience,' in which an individual exists in some form entirely independent of the body, it is highly unlikely that such a form would utilize perceptual systems identical to those of the physical human form.

Spiritual teachings tell us that we have a reality beyond that of this world. LaBerge concludes that the OBE may not be, as it is easily interpreted, a literal separation of the soul from the crude physical body, but it is an indication of the vastness of the potential that lies wholly within our minds. 'The worlds we create in dreams and OBEs are as real as this one, and yet hold infinitely more variety. How much more exhilarating to be "out-of-body" in a world where the only limit is the imagination than to be in the physical world in a powerless body of ether! Freed of the constraints imposed by physical life, expanded by awareness that limits can be transcended, who knows what we could be, or become?' [LL91].

Out-of-Body Tools

Most people taking part in discussions of OBEs seem primarily interested in developing and ability to do so themselves and to learn to control the experience. Aids to people wanting to develop such abilities, which include books, audio tapes which are claimed to assist in the process, and training programs are available from:

The Monroe Institute 365 Roberts Mountain Road Faber, Virginia 22938-9749 U.S.A.

Email: info @ monroeinstitute.org Internet: www.monroeinstitute.org Phone: 434-361-1252
Product Orders: 800-541-2488

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